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ABSTRACT

The papers in this monograph represent the collective comments of speakers at a January 1986 conference addressing emerging issues in the rural economy of the South. The opening paper suggests that prospects for rural southern economic development are tied to new business development, new agricultural products, automated traditional manufacturing, tourist and retirement development, growth industries, foreign investment, vocational education and retraining, financial services, defense spending, and foreign markets. Next, employment patterns in the nonmetropolitan South are presented and discussed. The third paper reviews the role of agriculture in the transformation of the national and southern economy since World War II and provides statistical data and tables illustrating changes in unemployment, manufacturing, mining, farm debt-asset ratios, and land values. The remaining papers focus on four areas of concern: infrastructure and transportation, education, values and attitudes, and agriculture and the community resource base. These papers suggest the need for regional planning and collaboration; greater commitment to education, continuing education, and adult literacy; inclusion of racial and sex discrimination issues in economic development policy formation; and attention to issues such as farm/urban conflicts, land use, environmental regulation, local government finance, and changes in the price and/or availability of inputs. (NEC)

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Emerging Issues in the Rural Economy of the South

Proceedings of a Regional Workshop

January 1986

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Proceedings

EMERGING ISSUES IN THE RURAL ECONOMY OF THE SOUTH

Hyatt Birmingham
Birmingham, Alabama
January 13-14, 1986

Sponsored by

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FOREWORD

Are there clouds over the Sunbelt? Has "placism" replaced "racism" as a problem in the South? How do the values and attitudes of people in the South influence their opportunities for economic development? Does a major highway provide enough economic benefits to rural counties to offset the outmigration that it can encourage? These are questions that confront those of us in the South who are concerned with issues of economic development, especially as it relates to the rural South.

The papers in this monograph represent the collective comments of speakers at a January 1986 conference in Birmingham, Alabama. That conference had as its title "Emerging Issues in the Rural Economy of the South." Its genesis began as a joint project of the Ford Foundation, the Southern Growth Policies Board and the Southern Rural Development Center. The project culminated is the report **After the Factories: Changing Employment Patterns in the Rural South.** This report, written by Stuart A. Rosenfeld, Edward M. Bergman and Sarah Rubin, provided ample evidence of the restructuring of the southern economy and its implications for rural areas in the region.

However, its focus was primarily upon the manufacturing components of the southern economy and how employment shifts within industries had disproportionately impacted rural areas. An additional problem occurs when one considers the traditional basis of the southern economy and how the existing agricultural crisis compounds the problems of economic development in the rural South. This concern provided the additional input of the Farm Foundation and the University of Georgia's Cooperative Extension Service into the January conference. As a result, the conference and the papers in this monograph highlight four areas of concern in looking at emerging issues in rural economies of the south: infrastructure and transportation, education, values and attitudes, and agriculture and the community resource base.

This monograph, published by the Southern Rural Development Center, does not provide answers as to how we may solve the economic development problems of the rural South. It does, however, raise many significant issues that can be the starting points for specific policies that can address these problems. The participants at the January conference represented a broad cross-section of economic development interests. This publication can serve to remind them of the pressing problems we face. Hopefully we will act before too many clouds blot out the sun over the Sunbelt.

Rusty Brooks
Extension Sociologist/Economic Development
Cooperative Extension Service
University of Georgia

PROSPECTS FOR ECONOMIC DEVELOPMENT IN THE RURAL SOUTH

WILLIAM F. WINTER

I want to talk to you today about a place that most of us here know well. It is where I was born and grew up. It is where at least six generations of my family have lived and worked. It is a region and a people and a way of life that are a part of a larger culture but that possess almost unique characteristics that somehow set them apart. I want to talk to you about that other South that, a hundred years after Henry Grady described it in New York City, still remains an unfulfilled legacy. I want to talk to you about the rural South of the 1980s.

Without repeating the rhetoric of Grady, I would suggest that we reexamine the circumstances that see this region with an abundance of some of the most basic natural resources in the world - rich land, fresh water, timber and energy - still remaining the poorest part of America and, after a period of hopeful progress, now getting steadily poorer. Is there some indefinable hex that haunts this land like a plot out of a Faulkner novel and that condemns it forever to be a region of wasted dreams and lost opportunity? I do not know that we have been victimized by hexes, but I do believe we have been victimized in the past by myths.

One of the most insidious myths that delayed for many years the economic emergence of the nonmetro South and indeed the South as a whole was that we could build a competitive economy on low wages, minimum education and racial discrimination. Dr. James Cobb, professor of history and Southern studies at Ole Miss, pointed this out in his recent book, **The Selling of the South.**

> In its formative years the South's industrial tradition was heavily influenced by the economic legacy of the plantation. Planters and industrialists found it mutually advantageous to maintain an abundant, controlled labor supply, eliminate the prospect of a political challenge from below, and perpetuate fiscal policies that kept taxes low and governments small. By the 1930s the South's strategies for industrial growth were so thoroughly intertwined with other traditions like white supremacy, minimal government and regional chauvinism that political and economic leaders resisted threats to one as threats to all.

This is a fairly accurate portrait of the region as I first remember it - as a boy growing up on a North Mississippi farm in the thirties. I did not know it at the time, but I was beginning to witness one of those historic watershed movements that would change the face of the rural South. To all intents and purposes it started with World War II, but it was really grounded in the economic adjustments that were taking place in the region. As the tractor, the cotton-picker and the twelve-row cultivator replaced the turning plow and the field-hand, hundreds of thousands of farm workers began a massive trek to the industrial plants of the great cities. In the decade of the 1950s, some 600,000 people moved out of the state of Mississippi alone, most of

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Former Governor of Mississippi

them from the farms and small agricultural communities, most of them black, most of them desperate for jobs and a better life. The City of New Orleans, the all-coach streamliner of the Illinois Central Railroad, picked them up at the little rural depots by the hundreds every day on its run up through Mississippi to Chicago. These migrants were not, however, all black and uneducated. It is estimated that 40 percent of the graduates of the state's universities and colleges in that decade also were a part of this mass exodus.

The pattern in Georgia, in Alabama, in Arkansas and in the Carolinas was much the same. The automobile assembly plants of Detroit and Flint and South Bend were becoming an amalgam of black field hands from the Delta and hillbillies from Appalachia. The rural South was moving to where the industrial jobs were.

For many who stayed, though, there was a new economic stability afforded by the counter-migration from the North and East of a steady stream of labor-intensive industrial plants in search of lower operating costs. This was a familiar pattern in many communities of the rural South in the decades of the 50s, 60s and 70s. It brought to many nonmetro areas a kind of economic renaissance that helped to neutralize the effects of the out-migration. This development coupled with significant advances for blacks on the civil rights front seemed to foretell a bright future for all parts of the region. The Sunbelt, by the late 70s, with a former governor from Plains, Georgia in the White House, was where the action was - not just in the Atlanta's and Orlando's and Houston's - but in the hundreds of small towns and rural counties in between - from Cracker's Neck to Little River, from the Pennyroyal to the Piney Woods.

Then almost without being noticed in the glare of the urban shopping centers, the nonmetro lights started to dim. While the sun was still coming up in many places in the Sunbelt, twilight was descending early on many others. No one can pin-point the exact date, but starting around the end of the decade of the 70s and accelerating in the 80s, a complex series of events began to take place that would have profound and permanent effects on the rural South. In fact the first half of the decade of the 1980s may eventually come to be regarded as another major watershed for the nonmetro South - with a permanent impact as pervasive as that earlier period of the 40s and 50s.

In the first place it should be emphasized that for some rural areas there never had been a renaissance. The nonmetro South as a whole remained the home of the nation's poorest, least educated, and most dependent people. Still there was evidence of steady progress. Statistics through 1979 showed that in every Southern state there was an overall gain in per capita income as a percentage of the national average. In cyclical industries like mining the results were made totally unpredictable by the world's energy price wars, and depending on the price of oil, coal miners as well as the oil-field workers rode a dizzy roller-coaster in those years from bust to boom to bust.

Unlikely as it may have appeared to rural Southerners, global developments probably have contributed as much as anything else to their recent economic problems. In addition to the energy dislocations, a more encompassing difficulty has been the growing foreign trade deficit. Beginning in the early 1970s when the balance started to swing against the U.S., those deficits have skyrocketed in the 80s, fueled by high real interest rates and a strong dollar. The results have been nothing short of catastrophic for the industries that the nonmetro South had come to rely on - textiles, apparel, shoes, food processing, and light metals. What had already begun as a movement of these labor-intensive plants to cheaper labor markets offshore developed in the 80s into a stampede under the impetus of the unfavorable dollar exchange rate. The result in many of those rural counties is now an unemployment level three or four times as high as that of nearby metro areas.

All of this has been taking place at the same time and for some of the same reasons that an agricultural recession of alarming proportions has reduced many farmers to economic levels reminiscent of the 1930s. Even for the relatively secure farm operators, land values have plummeted and net worth has been drastically reduced. The result has been felt in a series of aftershocks that have buffeted the entire agri-business sector that makes up a very substantial part of

the economy in many communities. And it has not been just agricultural products that have taken a beating. Raw materials in general - the staples of the rural South - cotton, soybeans, and tobacco from the farm; wood products from the forests; oil and coal - all have suffered sharp price reductions, and there are no early prospects that there are better days ahead.

Concurrently with these unpromising developments there has emerged a national fiscal policy that is placing on the states and local political subdivisions a heavier responsibility for the basic social and economic support services that are necessary to attract new businesses or to be competitive in keeping existing ones. Agencies like the Economic Development Administration and regional programs such as the Appalachian Regional Commission have been cut back extensively and now seem ticketed for total demise under the uncompromising effect of Gramm Rudman. For the poorer counties where transfer payments represent the largest single source of income (and that is the case in half the counties in my state), the economic effect of national governmental retrenchment is being felt disproportionately more than in the metro areas. This simply means that the higher income areas will increase their rate of growth, while the rural areas will be declining. Or to put it more bluntly, it is a case of the rich getting richer and the poor getting poorer.

This is really the heart of the problem that we are called on to deal with - of finding a solution to the basic dilemma of two Souths which are rapidly growing further apart. One is represented by the popular image of the modern Sunbelt - a region of burgeoning cities, high-wage, high-tech industry and the good life - enjoying the fulfillment of that long-awaited promise of Grady's New South. But there remains that old South, largely rural, undereducated, underproductive and underpaid that threatens to become a permanent shadow of distress and deprivation in a region that less than a decade ago had promised it better days.

Some of these developments have been examined in considerable detail by Prof. Emil Malizia in a study prepared for MDC of Chapel Hill, North Carolina and by Dr. Stuart Rosenfeld in a report to the Southern Growth Policies Board. Those studies confirm with grim statistics the serious plight that confronts most areas of the nonmetro South. The following paragraph summarizes Prof. Malizia's unhappy findings:

> Experts were asked their opinions about the future of the rural southern economy. In general, the experts are far more pessimistic about the rural South than the official reports. In their view, the balance of economic forces will tilt against the rural South resulting in slower regional economic growth and decline of rural areas relative to urban areas. The nonmetropolitan South appears to be experiencing **permanent** changes in its economic base, not cyclical fluctuations.

Dr. Rosenfeld agrees. His study goes on to say:

> "The rural South's ability to recover from structural changes in the economy is hampered by its lack of wealth and underdeveloped human resources. Despite decades of industrial development, the nonmetro South remains the poorest area of the U.S. and has the lowest levels of educational attainment, the fewest doctors, and the lowest wages, relative to both the metro South and the nation."

Those conclusions are based on certain general findings about the nonmetro economy. In addition to the obvious finding that the nonmetro areas have lagged behind in terms of jobs and employment, there is also a picture of uneven and volatile growth based on local conditions. The outlook for the traditional manufacturing operations is found to be generally unfavorable. The near term prospect for raw material production and transfer is not encouraging.

The reports go on to confirm with strong statistical support that during the next decade, although there will be local exceptions, the nonmetro South as a whole will show little growth and a continuing decline in may areas. This will be particularly the case when the local economy is dependent on mining, agriculture or manufacturing. While the South will still be perceived as having a favorable climate for industry, rural areas will lag behind. The surveys reveal that every industry segment is showing preference for metropolitan sites and less attraction to rural areas. This bias is particularly strong in the case of high technology and research and development related industries, many of which insist on locations near engineering schools or other university

facilities. Service industries and distribution centers concentrate in urban areas, relying on the mass of related services that exist there. Foreign investors tend to look toward the metro centers, with their international airports and interstate highways.

Declines will continue in the labor-intensive manufacturing industries on which the nonmetro South has largely relied for employment. Even in those instances where rural communities can compete for new industry, the total number of such plants that locate each year average out to only about 28 per state over the region - most of them going to the metropolitan areas and in any event only after an average planning and locating process of some three years duration. There are obviously no quick fixes here.

It is apparent, therefore, from these studies that the old patterns of recruiting new businesses have changed for good. There no longer exists a reservoir of labor-intensive plants somewhere in the frozen North that are eagerly awaiting a phone call from the local Sunbelt chamber of commerce. With agriculture and forestry and energy all in trouble and the industrial migration substantially slowed, what is the rural South to do?

Amid the gloom of the reports there nevertheless come messages of hope and optimism based on those qualities of individual resourcefulness and entrepreneurship that long have been a hallmark of rural life. After all it was those intrepid yeoman farmers and venturesome business owners who built the South - in times far less promising than these. So what promises do we hold out now? Here are the few as set forth in these surveys:

1. **New business development.**
   Entrepreneurship is often stimulated by negative forces. Hard times should encourage more people to pursue their own creative business ideas and become self-employed. High schools should promote entrepreneurship among their students to attempt to hold the best of them in the area. Local financial institutions must understand their new responsibility to help provide the modest sources of venture capital for these new enterprises, many of which will also need financial management oversight.
2. **New agricultural products.**
   The mass production of crops in some agricultural areas may give way to the raising of specialty crops with emphasis on high product quality and professional marketing. The application of technology by the schools of agriculture and the cooperative extension service has already resulted in the development of many new food and fiber products. Last year, for example, Mississippi farmers had income of $200 million from 220 million pounds of catfish raised on 75,000 acres. This from a crop little more than ten years in development.
3. **Automated traditional manufacturing.**
   Although there will be fewer jobs, for those industries that do locate or remain in rural areas modernization and automation will make the existing jobs more secure, safer and better paying. The employees who remain will have more money to spend.
4. **Tourism and retirement areas.**
   Thousands of Southerners who left the farms 30 and 40 years ago are now coming back to their roots and bringing with them a retirement income that provides new purchasing power in the small communities to which they return. The lower living costs and relatively simple, benign life style of the rural South will be increasingly a base of growth for many areas. Areas like the Ozarks of northern Arkansas and the scenic mountains of the Carolinas, Tennessee, Georgia and Virginia combine both retirement and attractive tourism opportunities.
5. **Growth industries.**
   Although exceptions to the general trend, there will undoubtedly be many high tech, high growth industries which will prefer the lower living and production costs of nonmetro areas.
6. **Reverse investment.**
   Foreign-owned facilities will continue to increase, and the South will get its share of them. The big ones like Toyota and Nissan seem to prefer locations near metropolitan areas, but others will opt for smaller communities under the influence of intelligent state and local promotional efforts.

7. **Vocational education and retraining centers.**
   Many community colleges already form a nucleus for the small towns in which they are located. In Mississippi almost all of the 20 or more campuses are in municipalities of fewer than 3,000. As such they form an area network of adult education and retraining opportunities and an economically stabilizing force in the community in which they are located. It goes without saying that the maintenance of a strong and viable public school system lies at the very heart of the ability of every community to be competitive.
8. **Financial services.**
   Those nonmetro communities with financial institutions in tune with community needs will be the ones which are most likely to survive and progress. There must be a capacity by these agencies to evaluate local investment opportunities and a commitment to provide the venture capital and necessary financial services to create new businesses in the community.
9. **Defense spending.**
   Some nonmetro communities located near or adjacent to defense facilities will continue to do well.
10. **Declining dollar.**
    While outside the preview of what we can do much about, the fact of the matter is that this is a key to foreign markets for Southern manufacturers and farmers.

Indeed, let us understand that those forces that determine national economic policy will undoubtedly have more to do with what ultimately happens than anything you or I can suggest. Government fiscal policy, the deficit and its impact on interest rates and inflation, defense spending, domestic assistance programs, farm policy, deregulation, migration and foreign trade policies all singly and interrelatedly will have a critical impact on the future of us all here in this room and on the areas that we represent. We can only petition those who call the shots at the national level to be mindful of the precarious economic balance that exists in the rural South. National policies that are not sensitive to the special needs of our region can wind up creating an irreversible decline for many Southern nonmetro communities in spite of all that may be attempted at the state and local level.

It is for all of these reasons and many others that the work of the Commission on the Future of the South, now beginning to get underway, is so important in this critical period. Under the creative and dynamic direction of Governor Bill Clinton, Chairman of the Southern Growth Policies Board, the Commission has been given the task not just of restating old problems but of providing new and productive solutions that can be the basis of effective action by the policy-makers of the region.

For in the final analysis our task remains to bring the most creative and imaginative thinking in our region to the solving of these problems, knowing that we do not nor may we ever have all the answers but assured also in the fact that the stakes are sufficiently important to justify our noblest efforts. Let us be reminded also that there is a national interest as well as the interest of the region that is involved in this. For I am persuaded that the preservation of a socially and economically viable and productive rural South, with all of its intangible values such as a sense of family, of neighbors and of peace; an appreciation of our natural bounty and beauty; and a love of land and itself, is essential to the sustaining of a mature, responsible and compassionate nation.

EMPLOYMENT PATTERNS IN THE NONMETROPOLITAN SOUTH

STUART A. ROSENFELD

I first became interested in rural development issues about ten years ago, indirectly, through my work in rural education. At that time, the South looked like it was in hog heaven. It served as a haven for plants escaping northern cities, northern wages, and northern weather. And in the South, the rural areas were quite successful. In fact one of the most popular college texts in the late 70s was **Industrial Invasion of Nonmetropolitan America,** which documented the exodus of branch plants to small cities and towns, everywhere but nowhere as vigourously as in the South. This shift generated–and was generated by--an economic development strategy we call "smoke-stack chasing." It didn't seem to bother people that it was a highly competitive strategy which was unsuccessful more often than it was successful. Or, that it rearranged many more jobs than it created. When you won a big one, it looked good. And more often than not, the winners were rural communities in the South, with their low-wage, nonunionized, surplus labor force and low taxes.

Then something happened. At first it was barely noticeable, overshadowed by the recession and by the megaproblems of northern industrial cities and midwestern farmers. But the signals soon became clear. I'm going to mention five.

First, one by one, rural plants that had been attracted to the South, and which formed the mainstay of many rural southern economies began to slow down and close down. Because the numbers in any one place were relatively small and did not generate long unemployment lines, they did not make headlines. By 1983, though, the press began to take notice. As more and more plants closed and with unemployment rates remaining high through the recovery, the number of distressed rural areas reached critical mass.

Table 1 shows how many plants I was told by state officials closed in one year–1983. And I've been assured that the numbers are understated. In any case, when these closings occur in a small community, they are devastating.

Second, we also noticed some unusual population trends. Even in the 70s, when the big news was the reverse migration, the shift of population to rural areas, the South was different. Sure, the nonmetro areas were growing faster than before, but not as fast as the cities (see Figure 1).

Just last month, newspapers across the country highlighted a new trend–people were once again choosing to live in cities. However, those headlines were more often than not, misleading. We can see from the numbers what's really happening. It's mainly the South that has turned around the national trend. We're the only region in the nation where metro growth is greater than nonmetro growth. The rate has gotten closer to other regions, but still the national trend is an artifact of what is happening in the South.

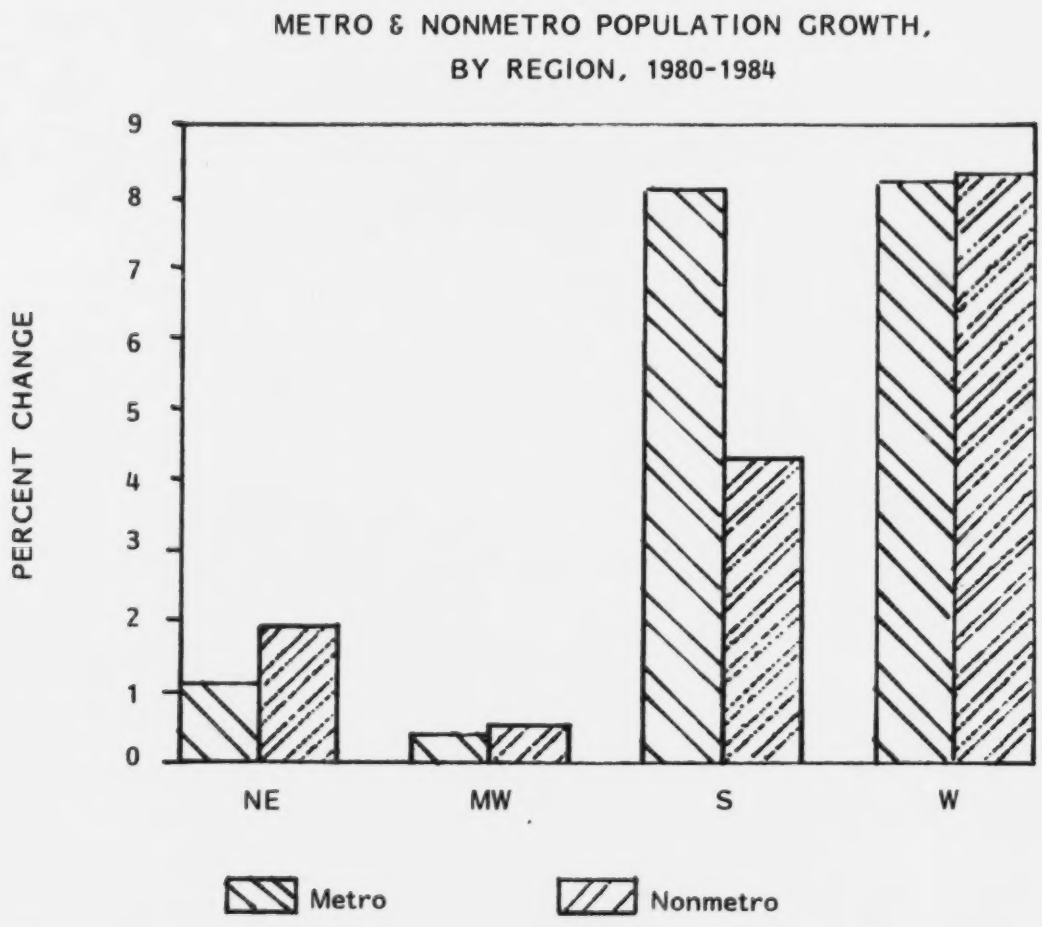
Director of Research and Programs, Southern Growth Policies Board

Table 1

PLANT CLOSINGS AND RELATED LAYOFFS
IN SELECTED SGPB STATES, 1983

State	Manufacturing Plants Closed	Number Displaced
Alabama	110	4,749
Arkansas	15	3,500
Georgia[1]	236	12,318
Louisiana	4	1,250
Mississippi[1]	90	4,400
North Carolina	62	7,730
Puerto Rico	100	1,109
South Carolina	31	3,782
Tennessee	20	2,979
Virginia	7	1,271

Figure 1



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Third, we also noticed differences in unemployment rates between urban and rural counties within states. While the major cities recovered from the recession and prospered, unemployment in rural counties remained high.

Fourth, we tracked the growth patterns of the emerging technology related industries and we surveyed the business climate indicators. Based on that information, it seemed that rural areas could not provide many of the conditions that are generally given high priority by emerging industries. Nonmetro areas were still getting some of the assembly activities associated with technology, but even that was increasingly limited by things such as access to major airports and lack of an educated work force.

Last, farming, which remains a significant source of rural jobs, was in trouble with declining land process and tighter money. As Jim Hightower of Texas says: "You can still end up with a small fortune farming. But you have to start with a large fortune."

The structure of agriculture in the South is somewhat different than that of other regions. One of the side effects of Southern rural industrialization has been an increasing reliance on off-the-farm employment (Figure 2).

Farms in the South tend to be smaller than in the North. Moreover, many marginal farms have grown dependent on local industry to supplement farm income. In 1980, the proportion of farmers earning most of their income off-farm is higher in the South than in any other region. Every Southern state is above the national average of 45 percent. So the combination of the state of American agriculture and the loss of off-farm employment has hurt Southern farmers.

Despite accumulating evidence of change, policymakers haven't been sure about the nature of the changing patterns. Were they just a matter of a slower recovery from the recession in rural areas? If so, the problem would take care of itself when the value of the dollar went down or when the business cycle shifted. Or were they a matter of long-term structural changes? The former required patience and short-term support until things got better. The latter, though, requires new strategies and new ways of thinking about economic development in rural areas.

That's where we came in. In November 1983, the Southern Growth Policies Board distributed an **Alert** outlining these emerging problems. We weren't sure yet whether the shifts were long-term, but we knew something was happening to the rural South. We also knew that economic and social conditions in the rural South, although improved over past decades, were still not good. They probably would not be able to meet the needs of the emerging technologies that were being highly touted as the source of new job growth. There were exceptions of course. Toyota for example, has just chosen to locate in Georgetown, KY. But that doesn't alter the general pattern we're finding.

Therefore, we decided to invest staff time and resources in researching the issue. We were concerned about the economic viability of the rural South's industry. We were also concerned about the impact on the South's agriculture.

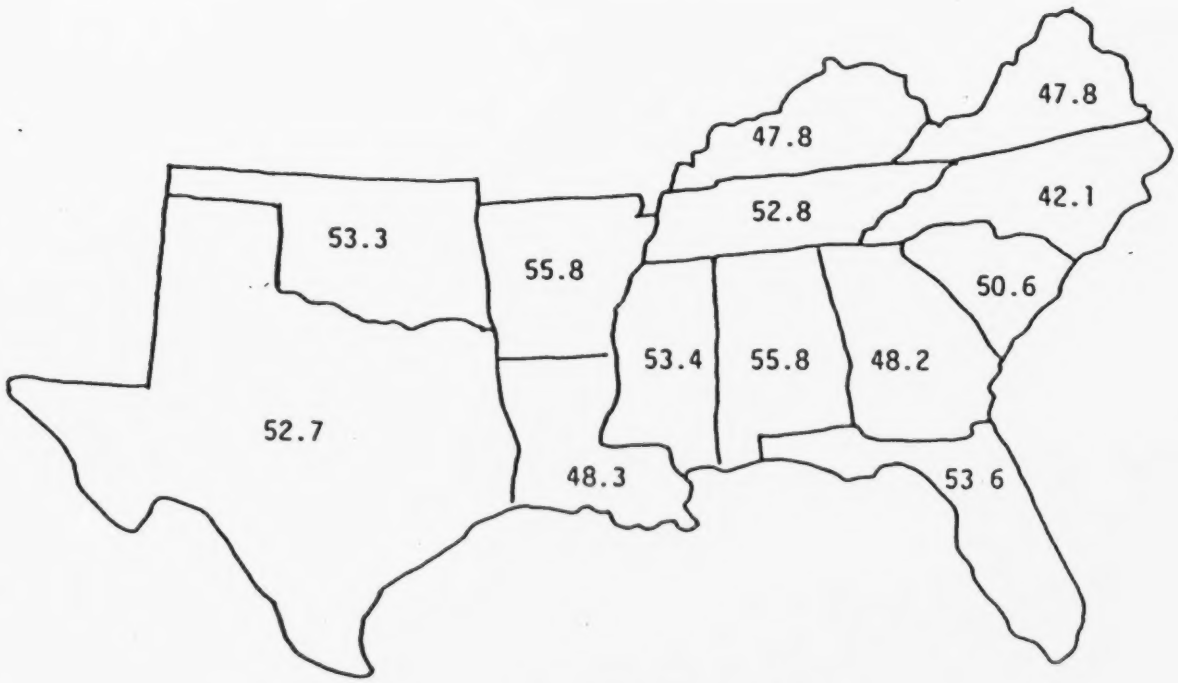
With help from Ed Bergman and some of his students in the Department of City and Regional Planning at the University of North Carolina and from a consultant, Sarah Rubin, we hoped to figure out the answers to some of these questions.

* Is the southern economy really undergoing long-term change?
* Does county location make a difference?
* Are there conditions that explain employment changes?
* What should we do about these conditions?

To answer these, we needed data, and we turned to a number of data sources. We used the Department of Labor's Employment, Earnings, and Hours data tape, the 1980 census data, the county business patterns, USDA classifications of counties, state road maps, plus some common sense thrown in wherever possible. We had more data than we knew what to do with. As much as I like numbers, there is such a thing as too many. It's said that a person with one watch always knows what time it is. A person with two watches is never sure. But, we managed to make some decisions as to what was most important and to compress it all into a single county-level data file for the South.

Figure 2

PERCENT OF FARMERS WHO WORKED OFF
THE FARM MORE THAN 100 DAYS



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Structural Change

The first question was: Are the changes in employment structural? Meaning, are they permanent? The evidence clearly indicates that the changes in the South's economy are structural. By that I mean that they are not simply a consequence of the business cycle or the value of the dollar. If they were simply due to the recession, we would expect to see industry trends in states that were fairly uniform, independent of whether the jobs were in urban or rural settings. However, that was not what we found.

Table 2 shows how industries in states performed relative to the state and national economy. A + means growth occurred in both u&r counties; a - means employment declined in both places. What really tells the story though are the u's and r's. A u means the manufacturing sector grew in cities while losing in nonmetro counties. An r indicates the opposite; that particular manufacturing sector grew in nonmetro counties and not in metro counties. As you can see, there are many more u's than r's. This means many industries within states in the South were outperforming the economy in metro areas while growing slower than the economy in nonmetro areas. This happened with enough consistency, both within manufacturing and among the major industrial sectors, that we concluded location was a factor.

After we discovered these trends, we wanted to know more about which counties are growing, what might account for the patterns, and what might be resulting from the patterns?

Now I'd like to show you, with a few statistics, just how the nonmetro South differs from the metro South and from the rest of the nation. M/NM differences occur in all regions, of course, but in no other region are variations quite so great. The Sunbelt implies growth and prosperity, while at the same time its social and economic indicators--those numbers that indicate how well the people are living--are still well below the national average. In fact, they're the lowest in the nation. This can be explained by separating the metro and nonmetro data.

Table 3 shows some selected statistics for the metro South, the nonmetro South, the whole South, and the whole nation. We used metro-nonmetro distinctions in our work, even though I may sometimes say urban or rural because its easier to say than nonmetropolitan. Most census data are by county, and metro-nonmetro are county labels. Urban-rural is place of residence; Rural means living in a town of 2500 or fewer or in the county. Nonmetro means a county with fewer than 50,000.

The South, as a region, is the most rural part of the country and the most nonmetro. It is not, however, the most sparsely populated. Western states are much more urbanized, meaning a larger proportion of their population live in large cities but, those who are rural, may be quite isolated. Another distinctive characteristic of the South is that the rural areas include a large minority population. Most minorities in other regions live in the large cities.

Per capita income in the nonmetro counties of the South is only 75 percent of per capita income in metro counties. As you can see, the metro per capita income is very close to the U.S. average. It's the rural part of the South that brings the regional average down. A very distressing fact is the per capita income of rural blacks in the South is only 33 percent of the national average. Level of educational attainment are also much lower in the nonmetro South--about three quarters of the metro South and the U.S. Also, you notice in the table, the rates of self-employment and unemployment are much higher in nonmetro counties than in metro counties.

It's clear that poor economic conditions in the nonmetro South are the cause of the low regional statistics. The metro profile you see up there is very close to the U.S. profile. Economic development strategies of the past decades did bring new jobs to the region, and did improve conditions for some, but not nearly as much as had been hoped. If analysts and the media presented data disaggregated by urban-rural, the problems would be much more apparent to the public.

Another question we asked was whether locational factors influenced growth. The two locational factors that we examined were proximity to metro centers and access to interstate highways.

Table 2

RELATIVE GROWTH IN EMPLOYMENT, MANUFACTURING INDUSTRIES 1977–1982

	Manufacturing Sector																		
	Food	Tobacco	Textile	Apparel	Lumber	Furniture	Paper	Printing	Chemicals	Petroleum	Rubber	Leather	Stone, Clay	Primary Metals	Fabricated Metals	Machinery, Non-Elec.	Machinery, Electric	Transportation Equipment	Instruments
Alabama	–		u	–	–		r	u	–		r		–	–	–			+	
Arkansas	+		u	–	–	–	–	+	u	u	+	u	–	u	u	u	–	u	
Florida	–	–		–	–	r	–	+	u				–	u	–	+	+	u	u
Georgia	–		–	–	–	–	–	u	–			u	–	+	–	u	+	r	
Kentucky	–	r	u	–	–	–	u	+	–	+	+	u	–	u	–	u	u	r	
Louisiana	–			–	–	u	–	–	u	+			–	u	r	+	u	r	
Mississippi	r		u	u	u	u	u	+	u	+	u	u	–		u	u	u	u	u
North Carolina	–	u	–	u	–	–	–	+	–		+		–	+	u	r	+	+	
Oklahoma	–			u	u			–		–	u		–	u	u	+	u	+	
South Carolina	–		–	–	u	u	u	+	–				u	u	u	u	+		u
Tennessee	–	+	r	–	–	–	–	u	–	u	u	–	–	–	–	–	u	+	+
Texas	–		u	–	–	–	–	u	–	–		+	u	u	–	+	+	–	u
Virginia	–	u	u	–	u	–	–	u	–			u	–	u	–	u	u	–	u

Code:
+ : Growing faster in both nonmetro and metro regions than SGPB economy and state's respective nonmetro and metro economies
– : Growing slower in both nonmetro and metro regions than SGPB economy and state's respective nonmetro and metro economies
r : Growing faster in nonmetro areas and slower in metro areas
u : Growing slower in nonmetro areas and faster in metro areas

Table 3

SELECTED DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS: Averages for SGPB Nonmetro and Metro Areas, Total SGPB Region, and United States

Characteristic	Non-Metro Average	Metro Average	Region Average	U.S. Average
Percent Population Change, 1970–1980	18.0	24.1	21.7	11.4
Percent Rural, 1980	61.7	16.4	33.4	26.3
Percent Black, 1980	18.9	18.0	18.4	11.7
Percent Minority, 1980	21.0	21.7	21.4	16.6
Percent High School Graduates, 1980	50.0	65.6	59.8	66.5
Percent College Graduates, 1980	10.0	17.4	14.6	16.2
Number of Physicians Per 100,000 Residents, 1980	76.9	181.8	142.4	173.7
Percent Self-employed,1980	8.8	5.5	6.7	6.8
Per Capita Income, 1980	$7,735	$10,458	$9,436	$10,495
Transfer Payment Per Capita, 1980	$1.37	$1.35	$1.36	—
Unemployment Rate, 1982 (%)	10.7	7.8	8.8	9.7
Female Labor Force Participation Rate, 1980 (%)	41.9	43.5	43.0	42.6

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In addition to classifying counties as metro or nonmetro, we classified them as adjacent or nonadjacent to a metro center and in terms of access to interstate highways. We came up with these six classifications (Figure 3).

* Metro--50,000 or more
* Adjacent/Corridor--touching a metro county and with an interstate
* Adjacent--touching a metro but with no interstate
* Cordinator--not touching and with an interstate
* Tier--not touching and near an interstate or with an interstate through a corner but without good access
* Remote--not adjacent and not near an interstate

Table 4 shows the number of counties in each category. Remote counties, those distant from cities and interstates, are the most numerous, although they contain a relatively small percentage of both employment and population. It's interesting to note that the nonmetro counties had a smaller share of jobs than people, indicating that either people are commuting into metro centers for work, that unemployment is higher--which we know is the case in most states--or that labor market participation is lower. And, of course, these numbers do not include farming, which would account for some of the difference.

We did not find much variation among these categories in the various economic and social characteristics I showed you a few minutes ago. The only two where a pattern emerged was on per capita income and education. There was what I'd call a corridor effect. Per capital income and educational attainment were slightly higher in the two categories with highways than in the other three nonmetro categories. Other characteristics seemed not to be strongly affected by location.

Growth Effects

With these categories established, the next question was does location in counties with respect to large cities and interstates influence changes in employment?

From Figure 4, we can clearly see that regionally, metro counties are doing better than nonmetro, although there were a number of states where this was not true. These exceptions were, in most cases, very rural states which do not have large metropolitan areas, such as Mississippi, Alabama and Arkansas, and which had overall growth during that period. Generally, though, it was the cities that were responsible for the Sunbelt boom phenomenon.

Within the nonmetro South, as we expected, we found that those counties adjacent to metro areas and have an interstate grew by far the most. It's important to remember that we are discussing averages, and that there are wide variations within categories. Although metro counties are growing slower in employment than metro counties, on the average they are growing. But, if we focus for a minute on those that are not growing, we can see the scale of the problem.

Figure 5 shows that despite average growth, one out of four nonmetro counties in each location actually lost net jobs. The numbers on the left represent the percent of the counties in each location that lost employment between 1977 to 1982. The numbers over the bars are the actual number of counties that lost employment.

The biggest surprise was the remote, isolated counties, which we thought would show the worst economic growth, did not do as poorly as we expected. They had the second fastest growth, even higher than the corridor counties. We suspected the averages were hiding what was really happening. Therefore, we substituted for the average growth in the states, the median growth, which is simply the middle value rather than the mathematical average. That is, the growth of the middle county when they are ranked. When we did that, the rankings of the remote counties in the states dropped considerably. Instead of growing the most in four states and least in only one, on the basis of median growth, the remotes grew the most in only one state and least in four. We concluded that much of the growth in remote counties was in those few counties with major tourist attractions, such as coastal resort counties or counties with some major natural resource that's in demand or counties that are attracting retirees.

Table 4

NUMBER OF COUNTIES AND DISTRIBUTION OF EMPLOYMENT AND POPULATION, BY LOCATIONAL CATEGORIES, SGPB SOUTH

Location	Number of Counties	Percent of Total Employment 1977	Percent of Total Employment 1982	Percent of Population 1980
Remote	362	8.0	7.5	10.4
Tier	86	2.0	1.7	2.5
Corridor	120	4.9	4.5	5.1
Adjacent	220	4.6	4.2	6.4
Adjacent/Corridor	272	10.4	10.1	13.1
Nonmetro	1060	29.9	28.0	37.5
Metro	282	70.1	72.0	62.5
Total, SGPB Region	1342	100.0	100.0	100.0

Figure 3

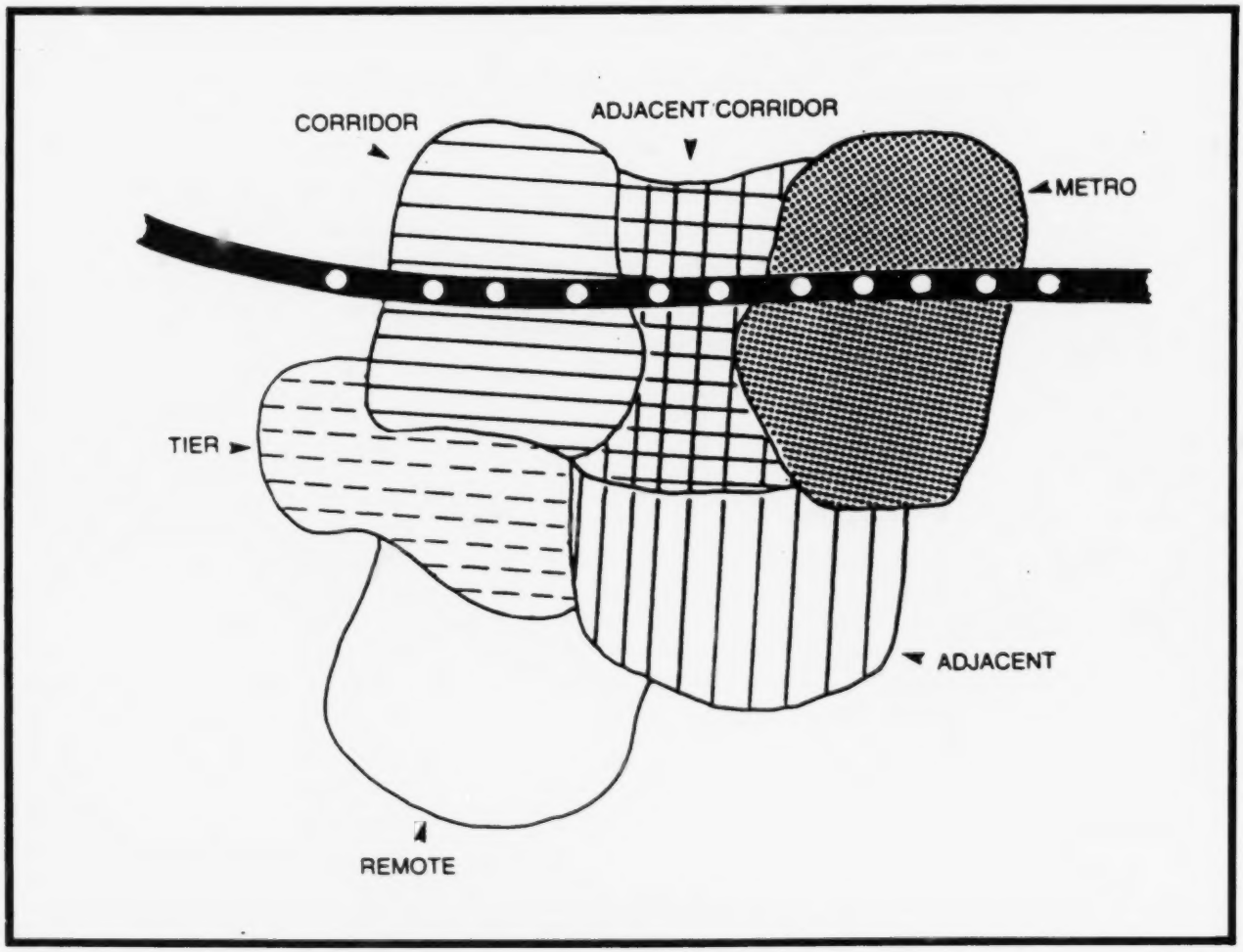

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Figure 4

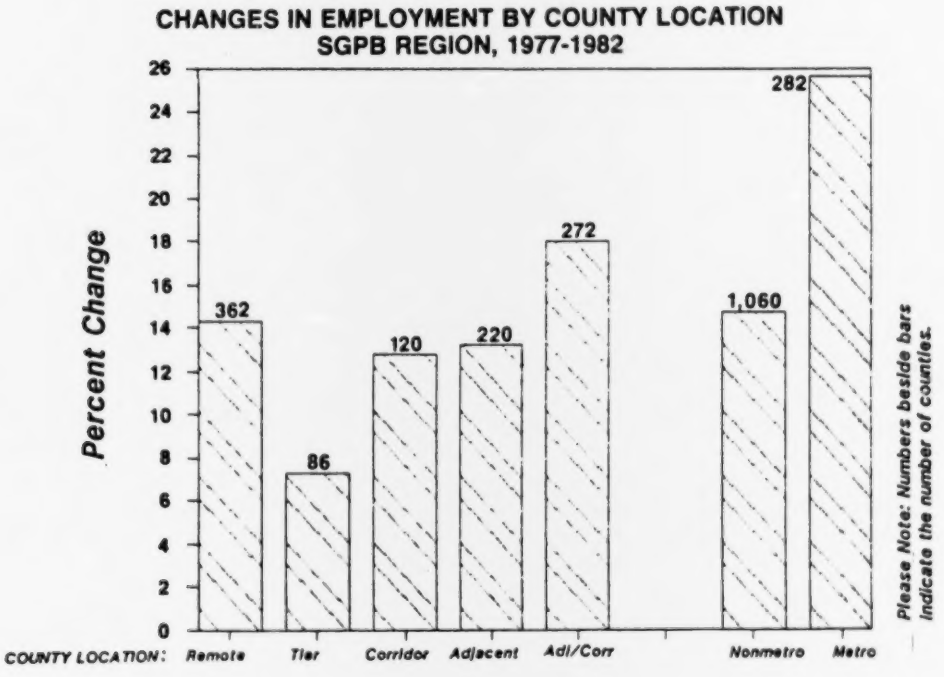
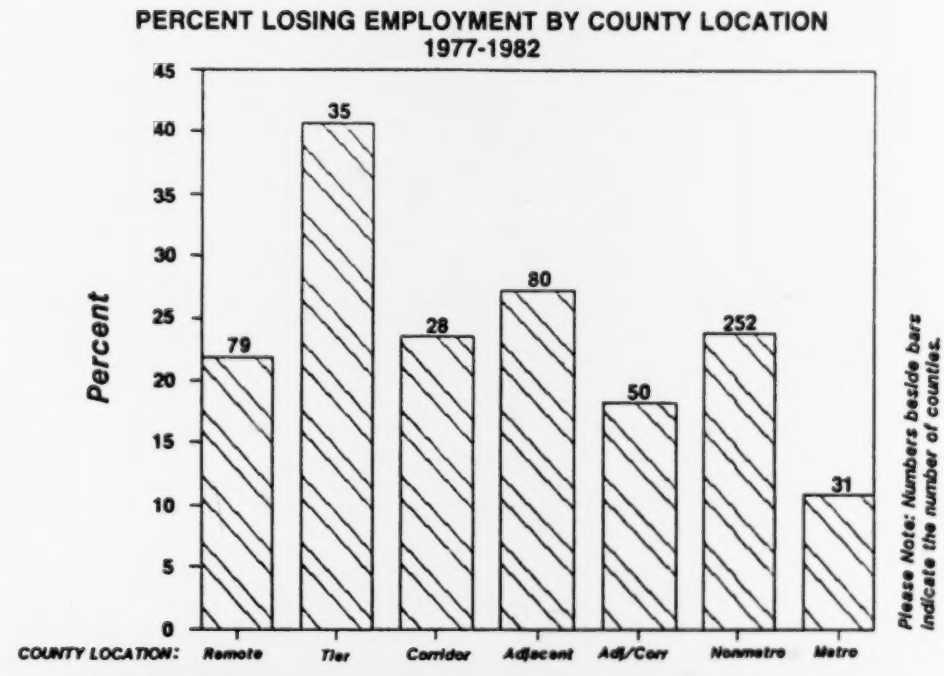


Figure 5



The effects of the two location factors, access to interstate highways and adjacency to metro centers, are summarized in Table 11. Although the effects of each is moderate (about three and a half percentage points), they are in the direction expected.

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Characteristics

Next, I want to compare conditions in the counties which are doing well to those that are in trouble. Are there any patterns that can explain growth? We ranked the nonmetro counties by percent growth and then separated them into quintiles. The first quintile is the 20 percent of counties with the highest growth, the second quintile the 20 percent with the next fastest growth and so on to the bottom quintile, the 20 percent with the counties with the slowest growth. Then we compared the characteristics of the five quintiles.

Some of the characteristics we compared across these five quintiles were the percent of the county's population that is rural, racial composition, per capital income, levels of educational attainment, and per pupil expenditures on education.

Growth, for example, varied with race. Figure 6 shows the percent of the county's black population for the various growth quintiles. The left side of the graph represents the slowest growing rural counties; the average percent of the population that is minority is 24. The right side represents the fastest growing rural counties; the average percent of the population is minority is 18. The higher the relative minority population, the slower the growth, confirming what has been suspected for some time--it's difficult to attract industry to locations with large black populations or there has been less effort. There are other factors besides race that could cause the differential rate of growth. Levels of educational attainment, for example, are lower for rural blacks and income is lower. But, even among poor counties--where there were little differences in education and income--counties with more minorities grew much slower. Poor counties with more than one-third of their population black grew only half as much as poor counties with less than one-third of their population black.

Growth also varied with income. Figure 7 shows the same kind of effect. The left side represents the slowest growing counties and their per capita income was $7,100. The right represents the fastest growing counties and their per capital income was $8,500. Here again, we don't know what causes what. All we can say is that faster growth occurs in counties with higher per capita income. This was a little surprising since one of the major business climate factors for years has been low wage rates.

Education

One of the strongest associations we found was for education (Figures 8 and 9). Growth under all the conditions we examined was associated with levels of educational attainment, measured in two ways: as proportion of adults with four years of high school and as proportion of adults with four years of college. In slow growth counties, shown on the left, 46 percent of the adults had four years of high school. In fast growth counties, shown on the right, 55 percent of adults had four years of high school.

This held controlling for income and controlling for race. But we were also interested in distinguishing quality of education, but there really are no good measures. So we took as a proxy, the educational expenditures in 1977-78. We had to assume, as the courts have in the school finance cases, that expenditures are related to quality of education.

We looked at the five states for which we could get that data for the year we wanted and where we could make the conversion from school district data to county averages. Figure 10 shows the employment growth in the 25 percent of the counties with the lowest state and local expenditures per pupil to the growth in the 25 percent of the counties with the highest per pupil expenditure. As you can see, the results are not very conclusive. In Louisiana and in South Carolina, we found that growth was directly related to expenditures. The nonmetro counties that spent the least, on the left, grew the least. The counties that spent the most, on the right, grew the most. However, we did not find that held true in Kentucky, North Carolina or Mississippi. This may in part be explained by the fact that expenditures were very low in all nonmetro counties in these states and there wasn't a lot of variation among counties. In all three states where you see little evidence of a relationship, even the highest spending counties are not much

Figure 6

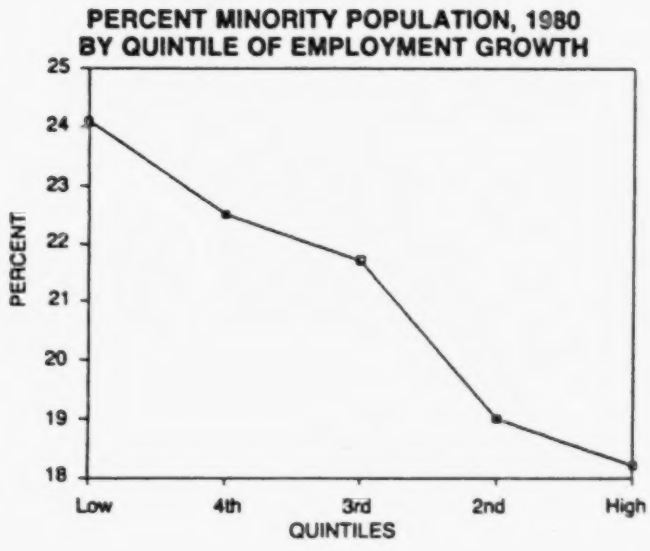


Figure 7

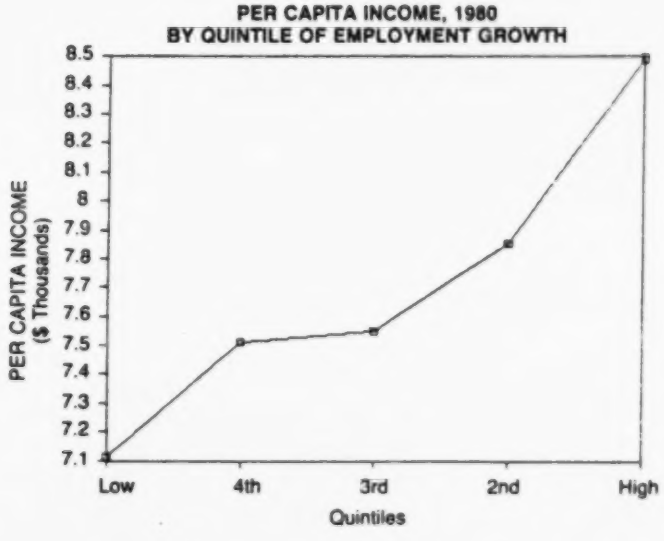


Figure 8

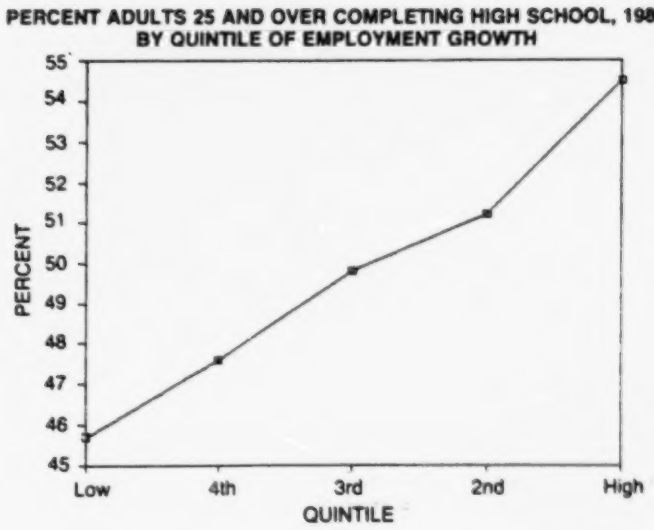


Figure 9

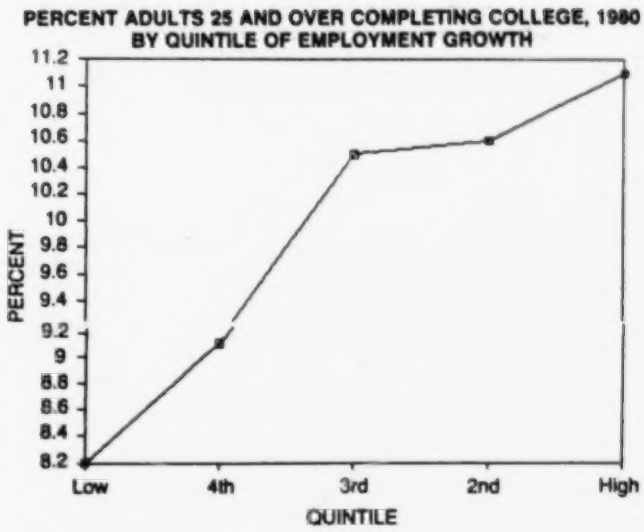
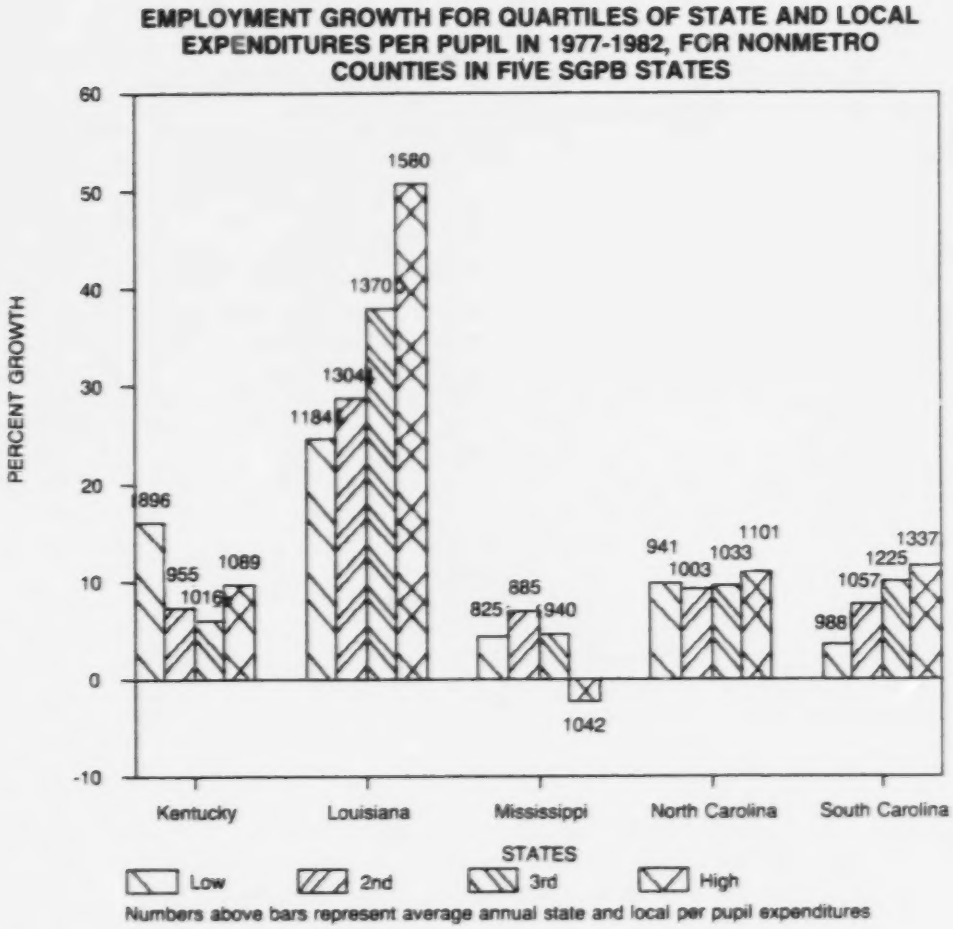


Figure 10



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more than half the national average. There has to be some "critical mass" of funds to show an effect. In Louisiana and South Carolina, where spending in some counties was higher, there is a relationship between spending and growth.

Industrial Composition

The next question we addressed was related to the industrial mix in the counties. How does the industrial composition of growing counties differ from that of declining counties? How is the industrial composition changing in nonmetro counties and does it affect growth? How are various categories influenced by locational factors?

To answer these, the staff examined employment changes in the various two-digit industrial codes. These are categories such as textiles, apparel, insurance, and banking. Rather than examine all of the sectors, we chose to group them in ways that would simplify but still be policy relevant. Manufacturing was divided into emerging and traditional durables and emerging and traditional nondurables plus a category we called new technologies, which was electrical, electronic, machinery, and instruments. Services were categorized as consumer, producer and urban; and agriculture, construction, and mining.

First, the shift from goods production to services is quite clear if we compare the jobs in manufacturing and services in the five growth quintiles (Figure 11). On the left, in the slowest growing counties, most of the jobs are in manufacturing. On the right, in the fastest growing counties, most of the jobs are in services. Counties that grew generally were dominated by service industries. Those that declined were dominated by manufacturing.

Figure 12 compares the industrial employment profile of metro and nonmetro counties. This is the percent of the work force employed in each of the industrial clusters. Differences in growth between metro and nonmetro can be partly explained by their different industrial profiles.

Metro counties are much more dominated by service industries, which have not been as affected by international competition and have even been boosted by technology. Nonmetro counties have about 30 percent of their employment in traditional manufacturing. Only about 8 percent of the metro workers are in traditional manufacturing. In contrast, urban and producer services account for one-third of all employment in metro counties and only one-fourth in nonmetro counties. The reliance of the nonmetro South on manufacturing is apparent.

When we look at the composition of the growth quintiles, we can see the industrial mix of the fastest growing counties is quite similar to that of metro counties. As we move from highest growth to slowest, we can see that the proportion of the labor force in services declines steadily and the proportion in traditional manufacturing increases. The slowest growing quintile has the largest proportion of employment in each of the six manufacturing clusters, including new technologies.

We also want to know what effect location has on various industries. Are there certain kinds of jobs that are more strongly influenced by interstate highways or proximity to a metro center? Figure 13 shows that:

* In agribusiness, for example, growth is highest in counties without interstates, the remote and adjacent counties.
* Construction, as you would expect, did best outside of metro centers.
* Traditional durables lost employment everywhere but in the corridor counties.
* Traditional nondurables lost everywhere, more in metro than in nonmetro, but of course there wasn't much employment to begin with in metro counties. Figure 14 shows that:
* Emerging durables, like traditional durables, grew fastest along corridors.
* Same for new technologies, but it also showed strong growth in remote areas. Again, there were a few relatively large remote counties that accounted for much of the growth. Horry County in South Carolina, Lee County in North Carolina, Alcorn County in Mississippi, Houston in Alabama, and Victoria in Texas are a few.
* Services were strong everywhere, but strongest in the adjacent/corridor counties.

Figure 11

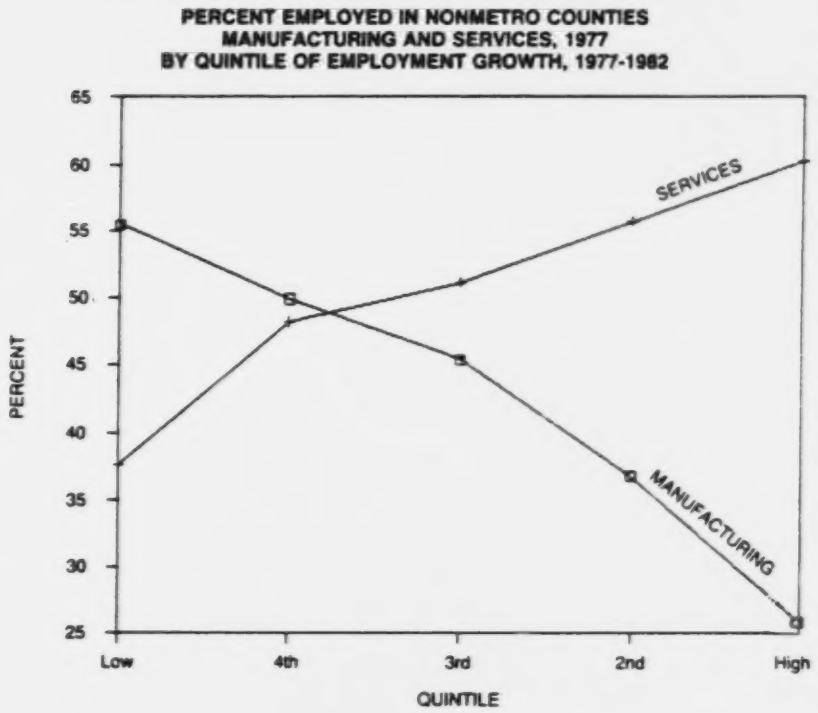
PERCENT EMPLOYED IN NONMETRO COUNTIES
MANUFACTURING AND SERVICES, 1977
BY QUINTILE OF EMPLOYMENT GROWTH, 1977-1982
65
60
55
50
45
40
35
30
25
PERCENT
SERVICES
MANUFACTURING
Low
4th
3rd
2nd
High
QUINTILE

Figure 12

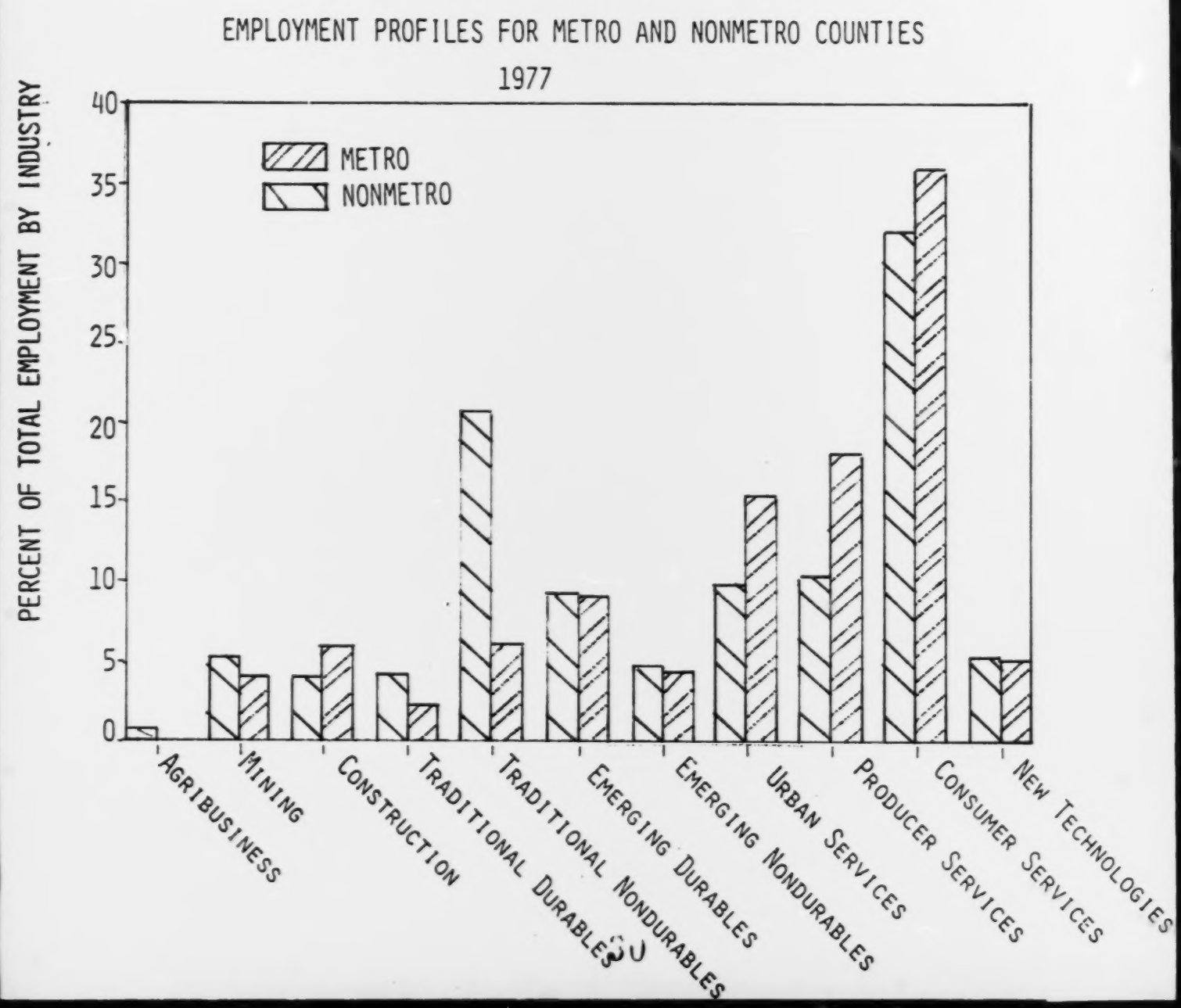
EMPLOYMENT PROFILES FOR METRO AND NONMETRO COUNTIES
1977
PERCENT OF TOTAL EMPLOYMENT BY INDUSTRY
METRO
NONMETRO
0
5
10
15
20
25
30
35
40
AGRIBUSINESS
MINING
CONSTRUCTION
TRADITIONAL DURABLES
TRADITIONAL NONDURABLES
EMERGING DURABLES
EMERGING NONDURABLES
URBAN SERVICES
PRODUCER SERVICES
CONSUMER SERVICES
NEW TECHNOLOGIES

Figure 13

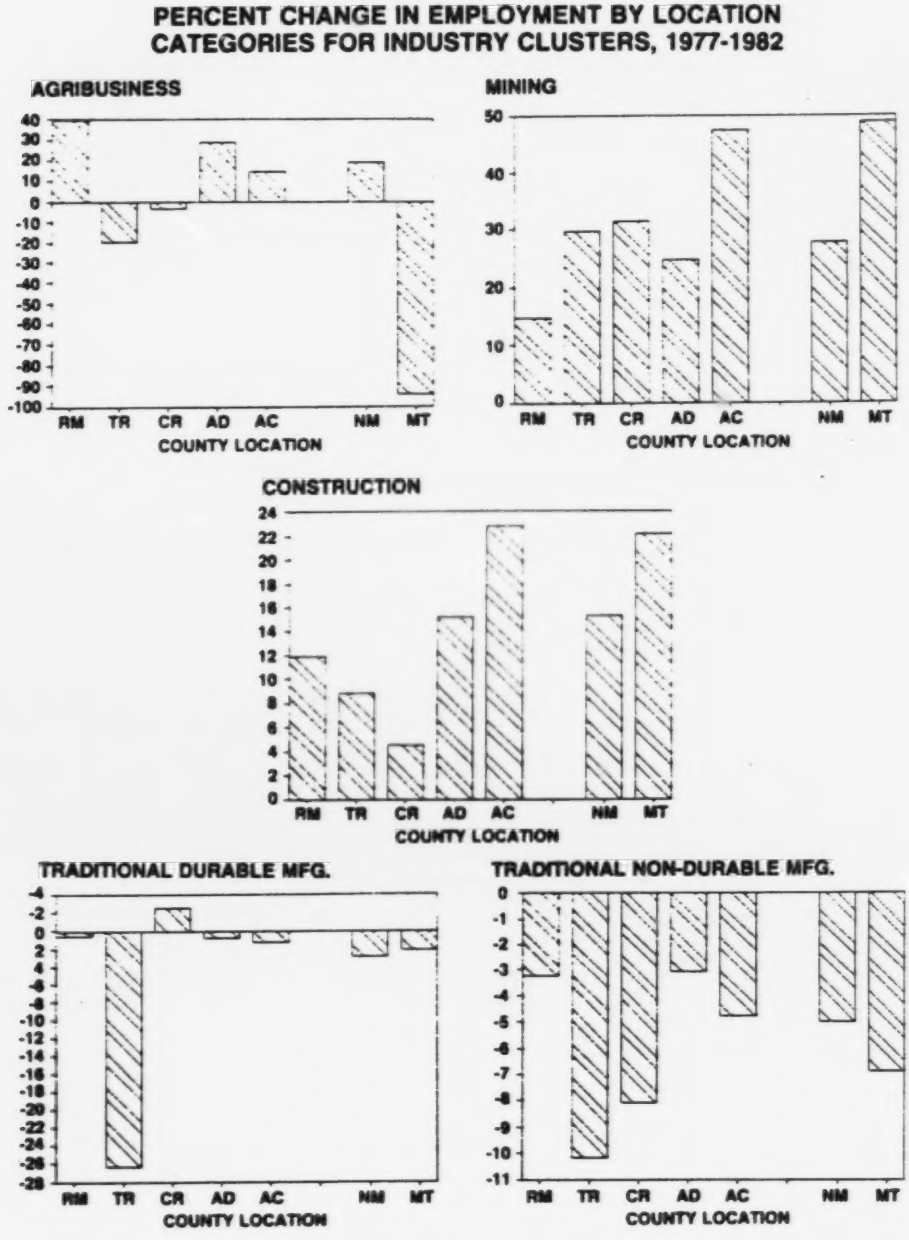

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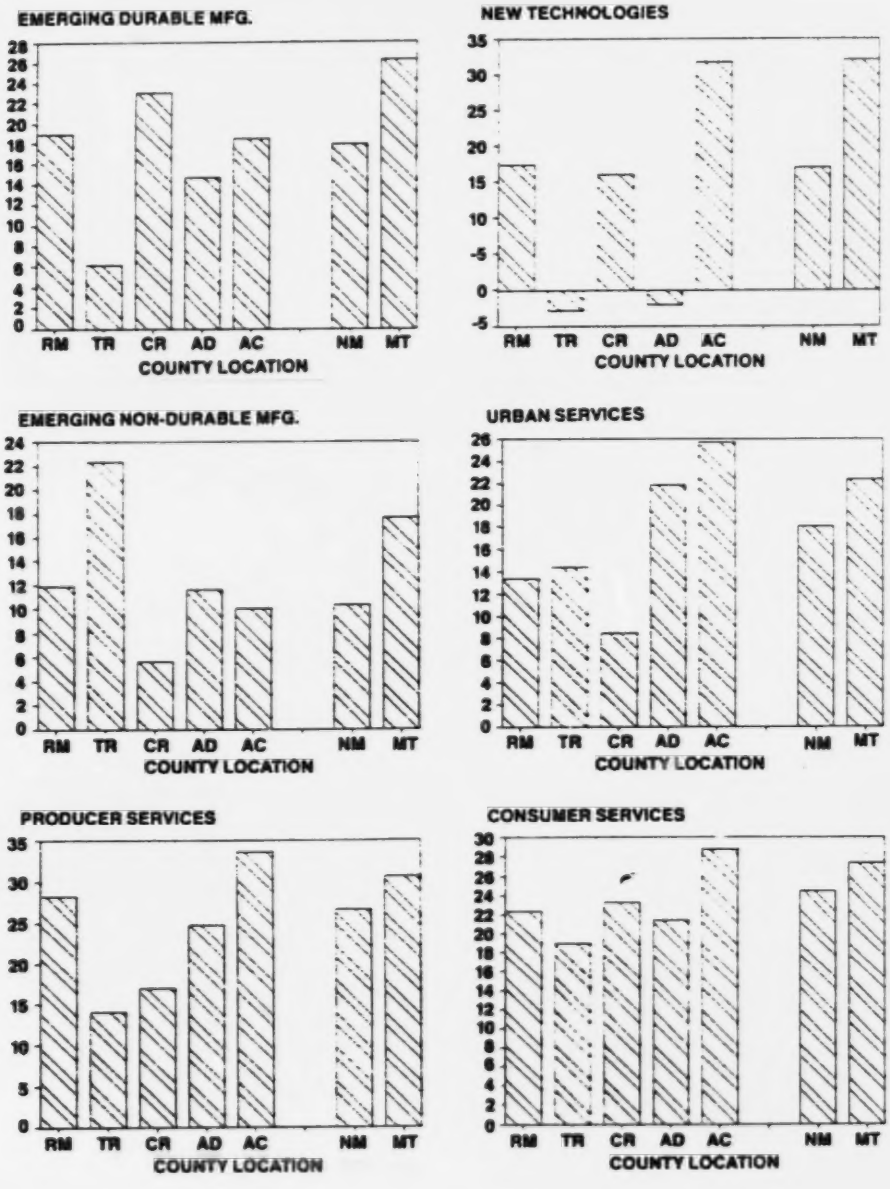
Figure 14

PERCENT CHANGE IN EMPLOYMENT BY LOCATION CATEGORIES FOR INDUSTRY CLUSTERS, 1977-1982



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We can see some patterns in growth and decline in Figure 15. The decline is along the eastern seaboard and in the middle states, and the growth is in the West, especially around the large cities of Texas.

When we take into account the large metro centers--those with a population of more than 500,000--we don't see strongest growth around Atlanta or Raleigh-Durham. The strongest growth is around New Orleans, Tulsa, Dallas, and other large western cities. This means that the counties surrounding the cities in the eastern and central parts of our region have been more dependent on traditional manufacturing industries, and new business growth has been offset by closings.

Another trap we can fall into is by assuming that rapid growth means prosperity. For example, Perry and Greene counties in Alabama, and in the midst of a number of slow growth counties, were in the fastest growth quintile. Yet their per capita income is among the lowest in the nation--half the national average--and they still had 17 percent unemployment rate at the end of 1982. Apparently they have brought in new jobs, but the economy was in such poor shape that they still fall near the bottom on measures of well-being.

Summary

1) Changes in employment are indicative of a semi-permanent restructuring of the South's rural economies, and metro areas are consistently doing better than nonmetro areas.

We now know that many of the jobs lost in traditional manufacturing will not return. Textile employment is still only around 80 percent of what it was a decade ago. Leather will not return. Few shoes are made in this country, but what can we learn from the data we analyzed.

2) Access to interstate highways is important, particularly for specific industry clusters such as urban services, new technologies, and construction. The new Toyota plant in Georgetown, Kentucky, is in an adjacent county with an interstate.

3) Growth counties are more likely to have higher levels of educational attainment and per capita income. The rural South, however, has the lowest per capita income and levels of educational attainment. Jobs are not flowing as rapidly to counties with high minority population, and the rural South is home to most of the nation's rural blacks.

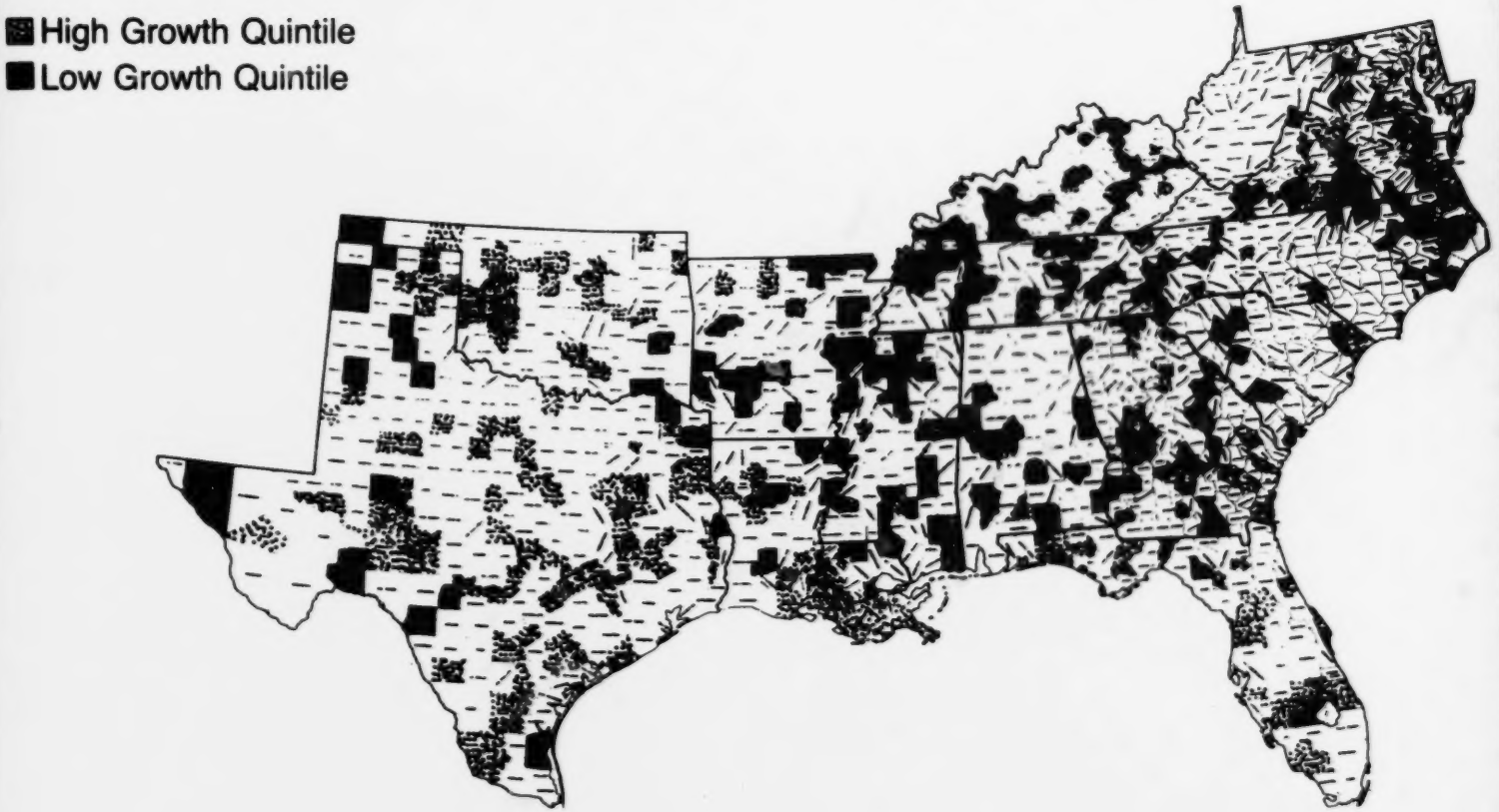
4) There is a rapid shift in employment opportunities toward service industries in counties that had been heavily dependent on manufacturing in the past.

To alter these trends and put nonmetro counties back on stronger footing will take some innovative measures. I don't think that just increasing efforts which worked in the past will work in the future.

We need state and local input from those who understand local circumstances and local values.

Figure 15

NONMETROPOLITAN COUNTIES WITH HIGH GROWTH IN EMPLOYMENT AND LOW GROWTH IN EMPLOYMENT, 1977-1982



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AN OVERVIEW OF THE SOUTHERN NONMETRO ECONOMY: AN HISTORICAL AND CURRENT VIEW WITH EMPHASIS ON SOUTHERN AGRICULTURE

FRED HINES AND MINDY F. PETRULIS

INTRODUCTION

The last 150 years have seen the U.S. economy transformed from one which was highly rural and farm-dependent to a modern, highly industrialized, service-based economy. Much of this transformation has taken place during the last 50 years. U.S. farm numbers reached their peak of nearly 7 million in the mid 1930's, three times the current number. But, as the number of farms has declined, millions of rural people have been transformed into urban dwellers dependent on jobs in nonfarm factories and service-producing industries. This industrial transformation has been accompanied by large interstate and interregional migrations of people with many traditionally agricultural states and regions losing farm-reared people to the more industrialized areas of the country.

Much of the early interregional migration took place from the rural, farm-based South to the rapidly-growing, industrializing Northeast and Midwest. During the late 1960's and 1970's, with the South's farm population greatly reduced and industry finding southern locations attractive, the South-to-North migration stream reversed. But, the economic environment of the 1980's has again surfaced questions about the permanence of economic growth and development in the South, particularly in the nonmetro areas. While southern metro areas have performed well, many nonmetro areas of the South, dependent on manufacturing and/or mining for their economic base, are now highly stressed (with unemployment rates much above the national average) by the ongoing adjustments in world energy prices and the intense international competition in the production of manufactured goods. And, southern farmers have not escaped the consequences of the current U.S. farm financial problems.

The purpose of this paper is to (a) review the role of agriculture in the transformation of the U.S. and the southern economy since World War II, (b) provide an overview of the current structure of the nonmetro economy of the South, pointing up problems in the basic sectors of agriculture, mining and manufacturing, and (c) provide some insights into how well the southern farm sector is adjusting, relative to farm factors in other regions, to current financial problems in U.S. agriculture.

Economic Research Service, U. S. Department of Agriculture

HISTORICAL PERSPECTIVE

The Nation

Economic history records the transformation of the nation's economy from one based largely on agriculture to one which relied more and more on manufacturing and more recently to one more oriented toward service-producing industries. For over 200 years, millions of Americans born to farm families or families in small farm-based communities have left their birthplace to find employment in urban industrial centers. The first official U.S. Census of 1790 found that 95 percent of the American population lived in rural areas. By 1980, only about one-fourth of the population lived in rural areas and the majority of these 59 million people followed economic pursuits outside agriculture. In fact, less than a tenth of the rural population lived on farms and these 5.6 million farm residents represented only 2.5 percent of the American population.

American agriculture has played a pivotal role in the nation's economic development. Technological developments in farming have made farmers more productive and also more dependent on purchased inputs and processing and marketing services from the nonfarm economy. Increased productivity in farming greatly reduced the demand for labor in agriculture and thereby created a surplus of farm-born and farm-reared workers. This surplus of labor provided resources for rapid growth of the nonfarm economy. However, demand for labor varied among regions and not all areas of the country were equally successful in providing nonfarm jobs for workers displaced from agriculture. In addition, nonfarm demand for labor has varied over time. The growth of the large manufacturing cities in the Northeast and the Lake States during the late 19th century and early decades of this century are examples of the early successes that some areas had in creating new jobs for people leaving farming. Later, scattered metropolitan areas of the Midwest, South and West also grew and attracted surplus labor from American farms and farm-based communities.

During most of the post-World War II period, many rural areas experienced declining or slow-growing employment opportunities. Between 1940 and 1970, employment increased slowly in nonmetro areas (Table 1). Although many rural jobs opened in manufacturing, construction, government and service-producing industries, job losses in agriculture and other natural resource industries such as forestry and mining were largely offsetting. During this period, nonmetro areas were simply unable to generate sufficient jobs to fully absorb additions to their labor force. As a result, many rural people migrated to metropolitan areas to find jobs. For example, in the 1950's U.S. nonmetro areas gained only one manufacturing job for every three they lost in the natural resource industries. By the 1960's, gains in manufacturing were beginning to offset losses in the natural resource industries. Finally in the late 1960's and early 1970's a large number of rural communities began to gain sufficient nonfarm jobs to more than offset their losses in farm employment. This turn-around in total employment growth resulted from growth in manufacturing and service-producing jobs in rural America. Increases during the 1970's occurred in service industries, government, manufacturing, construction, and even in the natural resource industries. Manufacturing employment continued to increase rapidly in nonmetro areas during the sixties and seventies while faltering in metro areas. Associated with the rapid employment growth was the well-publicized revival of rural population growth. The population growth rate for the decade of the 1970's was higher (14.4 versus 10.5 percent) in rural and small town communities than in metro areas during the seventies.

Table 1 — Components of U. S. nonmetro employment change

Industry	Time period			
	1940-50	1950-60	1960-70	1970-80
	Million employees			
Total	2.08	0.26	2.07	5.99
Resource-based	−1.11	−2.34	−1.32	.18
Service and government	1.82	1.68	2.20	4.41
Manufacturing and construction	1.36	.92	1.20	1.40

Source: Bureau of Census.

The South

The southern economy continued to be highly dependent on resource-based industries (agriculture and mining) when the rest of the country was making the transition to a modern industrialized economy. By 1940, over one-third of all the employment in the South was still in agriculture, compared to only 19 percent nationwide. In the next 40 years the transformation of the South was quite rapid and spectacular. Today, the South enjoys a modern economy that is well-diversified into manufacturing and service-producing industries. Recent farm population and employment numbers for the South confirm the late but fairly rapid transformation of the southern economy. For example, the 1980 farm population comprised only 2.4 percent of the total population and 17.1 percent of the rural population while farm employment accounted only for 3.2 percent of total employment. Except for the proportion of the rural population living on farms in the U.S. (9.5 percent), the national percentages for rural population (2.5) and farm employment (3.0) were virtually the same as those found in the South.

The transformation of the southern economy from one highly dependent on agriculture to one dependent on manufacturing and service-producing industries was accomplished at the expense of a massive displacement of farmers and farm workers. During the 1940's the South lost over 1 million jobs in agriculture; in the 1950's and 1960's the respective losses reached 1.5 million and 800,000 jobs (Figure 1).

The massive exodus from southern agriculture created a surplus labor force that was willing and eager to work for low wages. If displaced farmers and farm workers could not find employment in the local community, their alternative was to migrate to other parts of the country in search of better opportunities. In fact, this proved to be the only alternative for many young adults who migrated from the South. In the short span of two decades, 1940-60, net migration losses for the South totalled over 4.0 million people (Figure 2). This migration could be attributed, in large part, to the failure of the southern economy to generate a sufficient number of jobs to offset losses in agricultural employment or to provide sufficient employment opportunities for its growing population.

The massive migration of people from agriculture was virtually over by the 1970's. U.S. agricultural employment in 1970 had been reduced to less than 3 million jobs and represented less than 4 percent of total employment. In the South, agricultural employment totalled only 1 million jobs in 1970, compared with 4.4 million jobs just 30 years earlier. The decade of the 1970's brought 1.2 million additional manufacturing jobs to the South while the number of jobs in agriculture virtually stabilized. During this period population increased 20 percent in the South–almost double the U.S. rate of 11.4 percent (Table 2). In fact, every state of the South experienced faster population growth than the nation as a whole; and, as one would have expected, population growth in the metro South was more rapid (21.7 percent) than in the nonmetro South (16.5 percent). A large part of this population increase was due to the substantial net migration to the South during the 1970's, which totalled over six million people. This in-migration was pervasive among all the southern states. If Texas and Florida are excluded from consideration, the remaining southern states still gained 2.2 million migrants. For many of these states, the population turnaround came only after decades of constant losses of people through out-migration.

During the era of mass displacement from agriculture, manufacturing became a consistent, if limited, source of southern employment. Southern manufacturing provided 800,000 new jobs during the 1940's, 1.5 million in the 1950's, and even more in the 1960's and 1970's. The growth in manufacturing employment during the four decades exceeded the decline in agriculture by 750,000 jobs, thus transforming the southern economy from one based on agriculture to one based on manufacturing.

Today, the percent of manufacturing workers in the South is still about 1.6 percentage points below the national average (19.1 percent in 1983) (Table 3). The somewhat lower percentage results from the growing dependence of the metro South on service producing jobs. In 1983, only 15.5 percent of the jobs in metro South were in manufacturing. In contrast, nonmetro areas

Employment Changes in the South, 1940-80

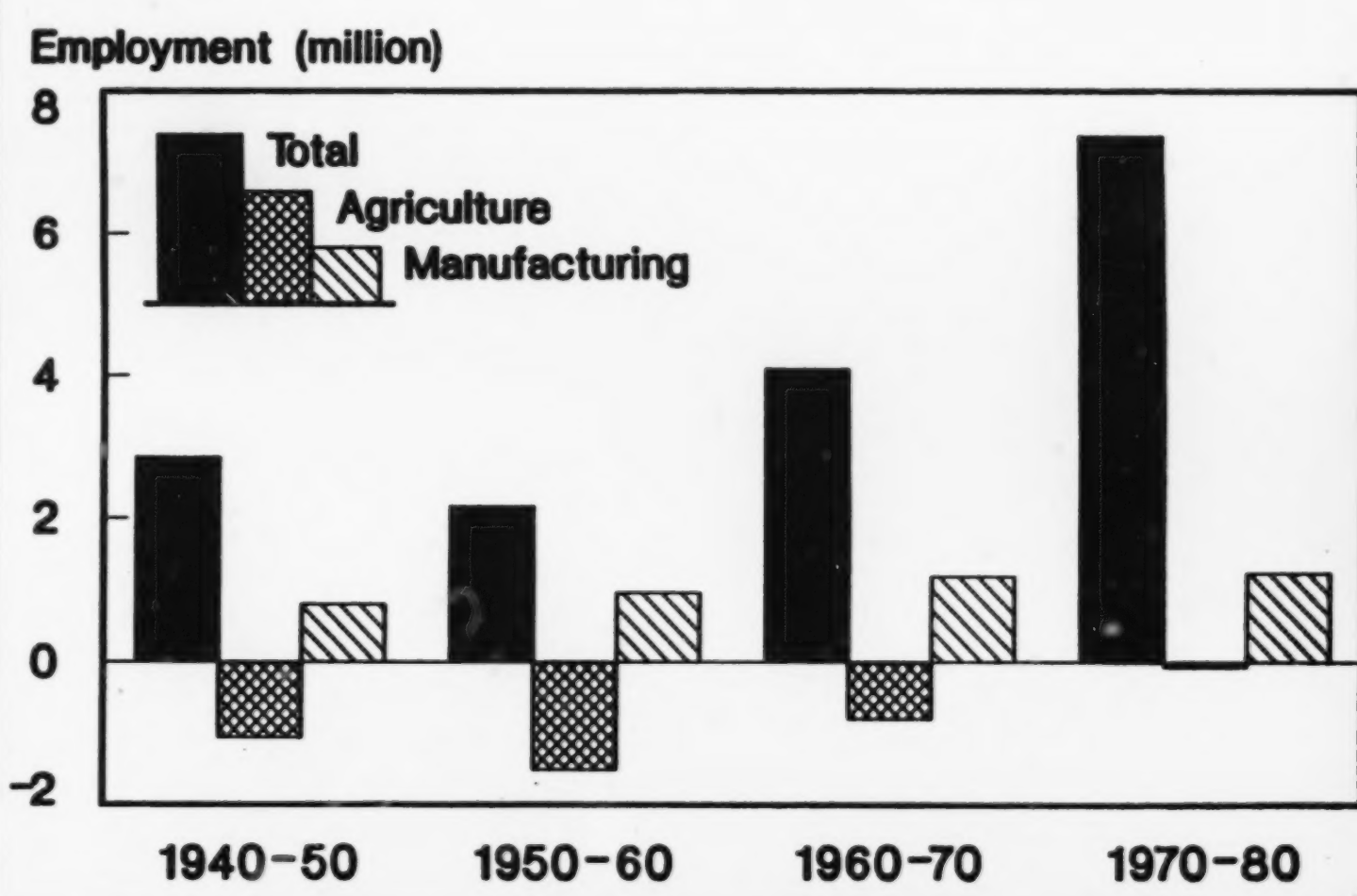

FIGURE 1

The South's Net Migration, 1940-80

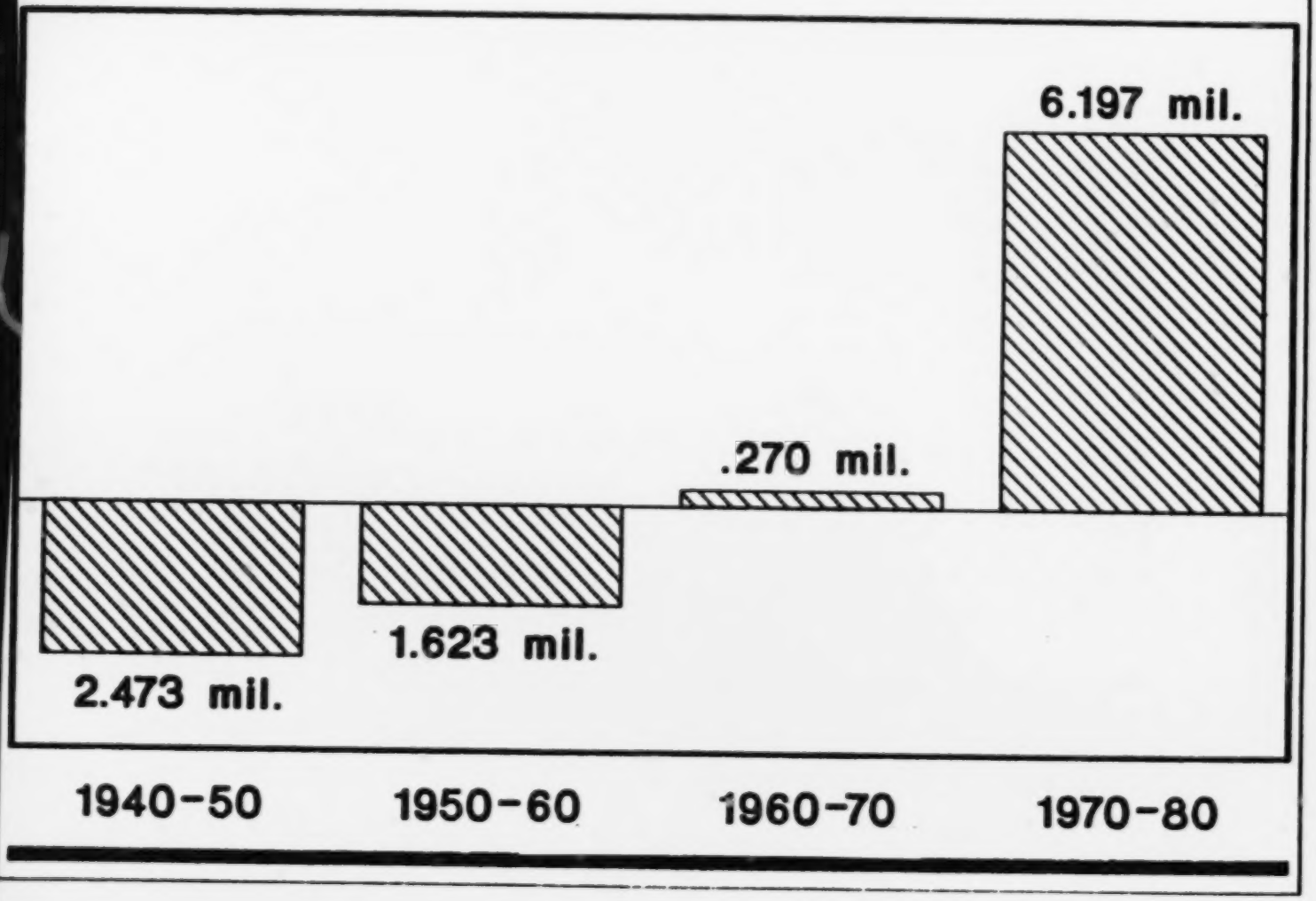

FIGURE 2

Table 2. Population growth rates for the South 1970-80, 1980-84

	Total		Metro		Nonmetro		Nonmetro	
	1970-80	1980-84	1970-80	1980-84	1970-80	1980-84	1970-80	1980-84
	Percent Change						*Ave. Annual Pct. Change*	
Appalachia:								
Kentucky	13.7	1.7	8.2	0.9	18.7	2.4	1.9	0.6
North Carolina	15.7	4.8	16.3	5.3	14.9	4.3	1.5	1.1
Tennessee	16.9	2.7	16.0	3.0	18.8	2.3	1.9	0.6
Virginia	15.0	5.4	14.2	6.9	16.7	1.8	1.7	0.5
West Virginia	11.8	0.1	5.1	−1.0	16.1	0.8	1.6	0.2
Southeast:								
Alabama	13.1	2.5	13.5	2.8	12.3	1.9	1.2	0.5
Florida	43.5	12.6	42.5	12.1	53.7	17.3	5.4	4.3
Georgia	19.1	6.8	21.2	8.8	15.7	3.6	1.6	0.9
South Carolina	20.5	5.7	24.0	6.0	15.6	5.3	1.6	1.3
Delta:								
Alabama	18.9	2.7	21.2	3.2	17.5	2.4	1.8	0.6
Louisiana	15.5	6.1	18.7	6.5	8.9	5.2	0.9	1.3
Mississippi	13.7	3.1	26.9	6.2	9.2	1.8	0.9	0.5
Southern Plains:								
Oklahoma	18.3	9.0	20.4	10.6	15.5	7.0	1.6	1.8
Texas	27.1	12.4	29.7	13.4	17.7	8.4	1.8	2.1
South, Total[1]	20.0	6.9	21.7	8.1	16.5	4.4	1.7	1.1
U. S.	11.4	4.2	10.5	4.5	14.4	3.4	1.4	0.9

[1]Includes MD, Delaware and D. C.

Table 3. Percentage distribution of employment for the U. S. and nonmetro Southern Regions, 1983

Region	Industry							
	Total	Services	Trade	Government	Manufacturing			All Other
					Total	Durable	Nondurable	
	Percent of Total							
United States, total	100.0	33.4	21.7	19.4	19.1	11.1	8.0	6.4
U. S. metro	100.0	25.9	19.5	22.4	21.8	10.8	11.0	10.4
South, total	100.0	31.1	21.4	21.7	17.5	8.2	9.3	8.3
South nonmetro	100.0	23.6	17.9	21.9	25.6	10.2	15.4	11.0
Appalachia, nonmetro	100.0	22.3	17.5	20.8	29.2	11.4	17.8	10.2
Southeast, nonmetro	100.0	23.4	16.7	22.2	29.8	9.7	20.1	7.9
Delta, nonmetro	100.0	25.1	17.8	22.7	24.0	12.0	12.0	10.4
S. Plains, nonmetro	100.0	25.0	20.1	22.9	11.9	7.2	6.7	18.3

Source: Bureau of Economic Analysis, U. S. Department of Commerce.

of the South had 25.6 percent of their employment in manufacturing–6.5 percentage points above the national average. Among the regions of the South, the Southeast and Appalachian nonmetro areas had almost 30 percent of their employment in manufacturing. The idea that the South is dependent on manufacturing appears to be much more of a nonmetro phenomenon. And, the one point that is clear is that the southern nonmetro areas do have a more consistent record of creating manufacturing jobs than the country as a whole.

NONMETRO SOUTH IN THE 1980's

In the late 1960's and in the 1970's many southern nonmetro areas began to prosper because of increasing job opportunities in local manufacturing and greatly reduced impacts of job losses in southern agriculture. By the early 1980's agriculture was no longer the dominant source of economic activity; manufacturing had become the dominant economic force in much of the nonmetro South. In 1983, 25.6 percent of nonmetro South's employment was in manufacturing industries, compared to 19.1 percent for the U.S. economy as a whole (Table 3). Even more notable was the large U.S./nonmetro South difference in dependence on nondurable goods manufacturing as a source of employment. Employment in nondurable goods manufacturing accounted for 15.4 percent of the total employment in nonmetro South in 1983, compared with only 8.0 percent for the U.S. as a whole. In the nonmetro areas of the Southeastern region employment in the nondurable goods manufacturing reached 20.1 percent of all employment-over twice the national proportion.

The growth and increasing specialization in manufacturing has also made the nonmetro economies of the South more vulnerable to the vagaries of the business cycle. Between 1969 and 1979 manufacturing wage and salary employment in nonmetro South increased almost 23 percent while comparable U.S. employment increased only about 4 percent (Figure 3). In the following 4 years, manufacturing employment declined 7 percent in the nonmetro South and almost 13 percent nationwide. An examination of manufacturing employment changes during the different phases of the last 4 business cycles (1969-83) clearly shows that adjustments in the southern nonmetro economy, especially during downturns, are becoming more and more similar to the national experience (Table 4). For example, in the 1969-70 downturn manufacturing employment in the nonmetro South decreased 0.2 percent, compared with a 4.2 percent decrease for the U.S. economy as a whole. But, in each of the three following downturns (1973-75, 1979-80, 1981-82) the manufacturing employment decline rate in the nonmetro South differed from the respective U.S. rate by less than one percentage point. There has been a similar, although less pronounced, convergence of growth rates during business cycle upturns. During the 1970-73 recovery period, manufacturing employment growth rate in the nonmetro South exceeded the U.S. rate by nearly 11 percentage points. In the following recoveries (1975-79, 1980-81, 1982-83), the nonmetro South/U.S. growth rate differential narrowed to 2.7 percentage points.

Throughout much of the 1970's unemployment rates for the nonmetro South were near U.S. levels (Figure 4). In 1979 and in the early 1980's, unemployment rates for southern nonmetro areas began to exceed the U.S. rate. The annual average unemployment rates for the U.S. peaked in 1982 at 9.7 percent. In the nonmetro South the average unemployment rate peaked in 1983 at 11.6 percent, two percentage points above the U.S. rate. During this period much lower rates prevailed in most southern metro areas (Table 5). Nonmetro unemployment rates during the early 1980's were particularly high in the Southeastern states and low in the Southern Plains states of Texas and Oklahoma (Figure 5). For nonmetro areas of the Delta and Appalachia, unemployment rates peaked in 1983 at 13 percent, 3 percentage points above the U.S. rate. In 1984, unemployment in the nonmetro portion of the Delta states still remained at 11.2 percent, almost 4 percentage points above the U.S. rate.

A recent Economic Research Service study has delineated U.S. nonmetro counties according to their primary sources of economic activity.[1] In this delineation, a county is defined as manufacturing-dependent if at least 30 percent of the income in the county was derived from manufactur-

Index of Growth in Manufacturing Employment

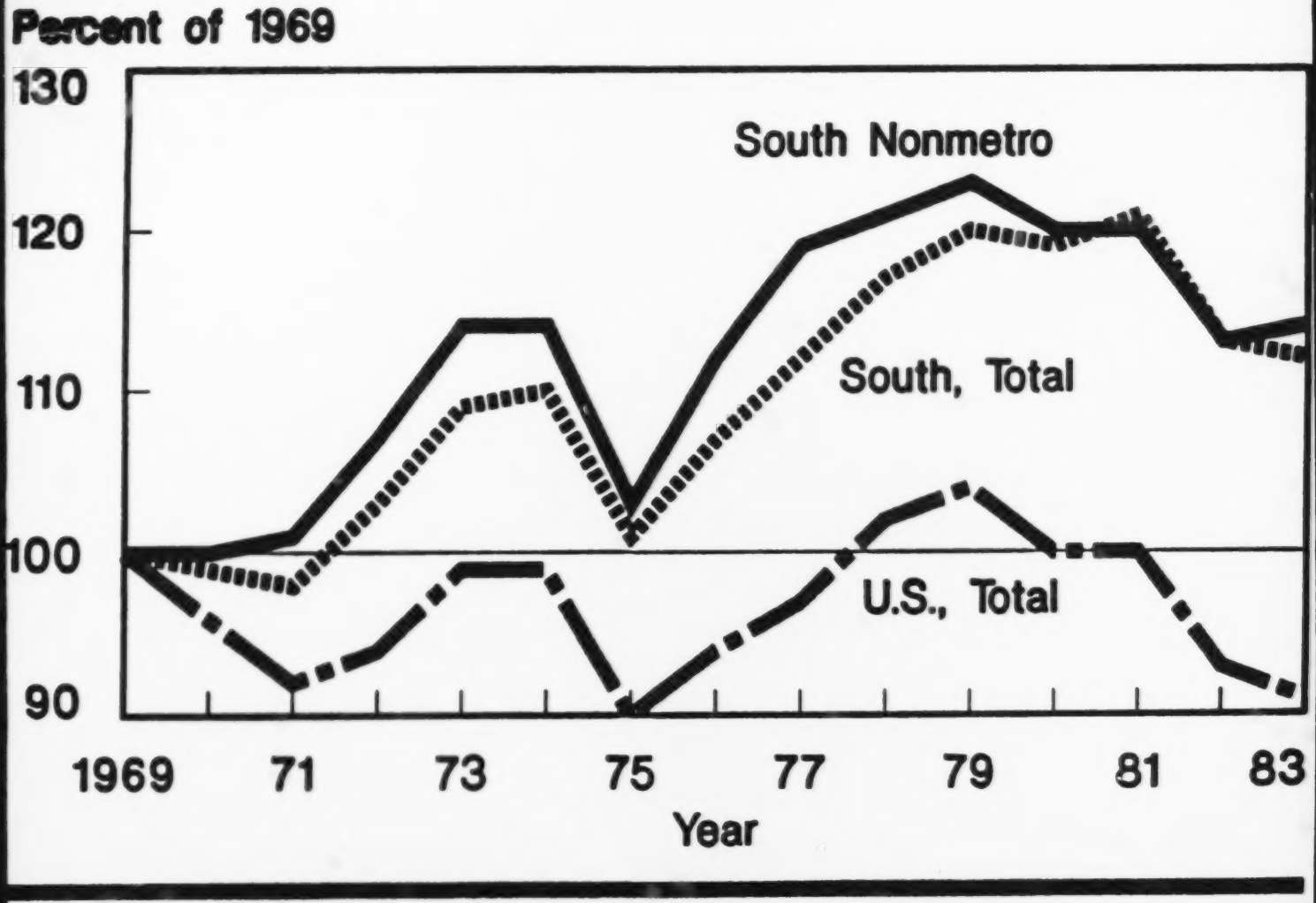

FIGURE 3

Table 4. Manufacturing employment growth rates over the business cycle, 1969-83

Business Cycle Phase	Growth Rate			
	United States		South	
	Total	Nonmetro	Total	Nonmetro
Peak-To-Trough				
1969-70	−4.2	−2.0	−1.2	−0.2
1973-75	−8.8	−9.3	−7.6	−9.4
1979-80	−3.5	−4.6	−.9	−2.6
1981-82	−6.8	−7.3	−6.2	−6.2
Trough-To-Peak				
1970-73	+3.5	+11.5	+10.5	+14.2
1975-79	+15.2	+18.2	+18.8	+19.0
1980-81	−.5	−.8	+1.6	+.3
1982-83	−2.2	+.5	−1.5	+1.2

Source: Bureau of Economic Analysis, U. S. Department of Commerce.

Unemployment Rates, 1976-84

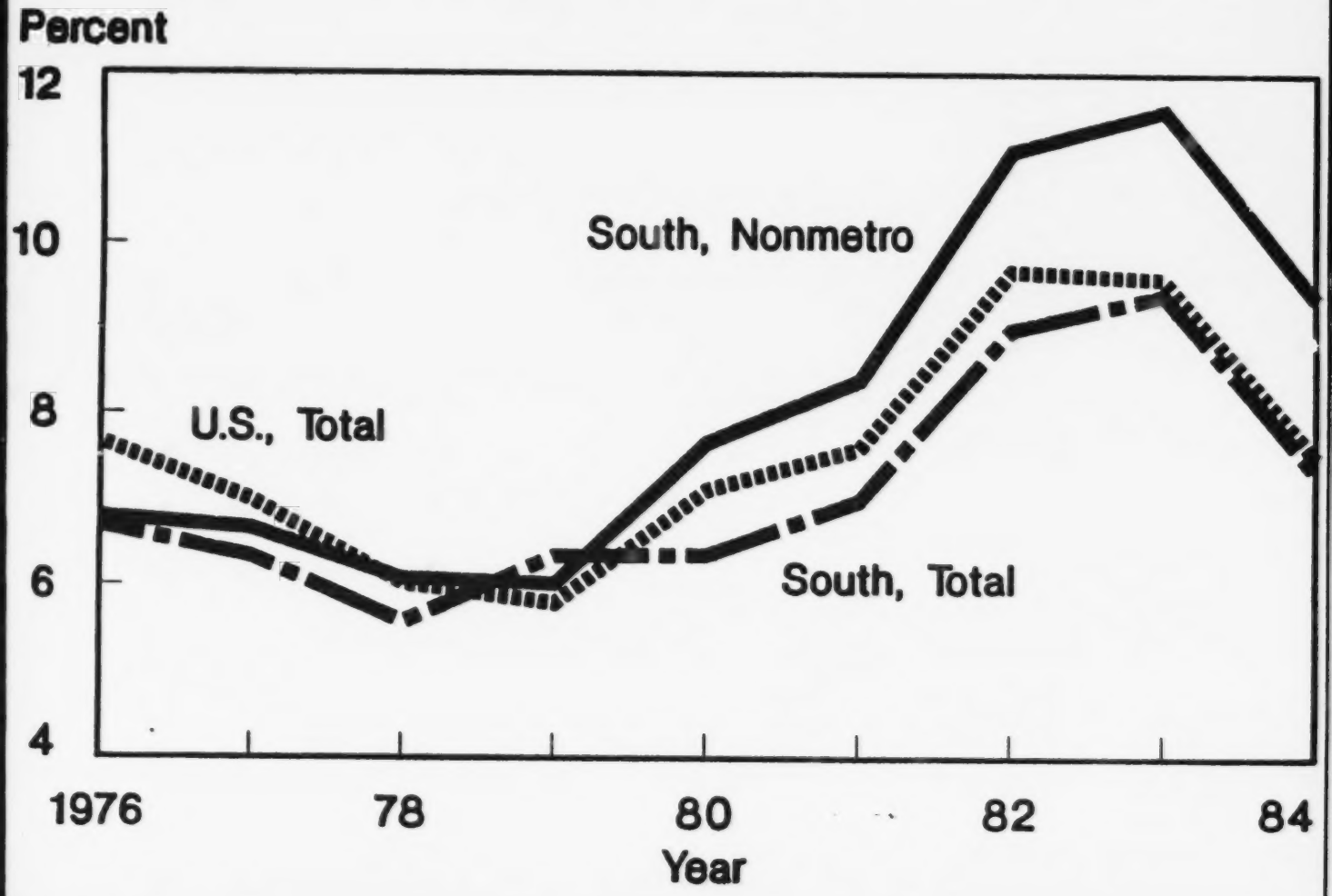

FIGURE 4

Table 5. Trends in civilian labor force, employment and unemployment, 1979-84

Areas and type of county[1]	Number of counties	Civilian labor force			Employment			Unemployment rate			Civilian labor force growth		Employment growth	
		1979	1982	1984	1979	1982	1984	1979	1982	1984	1979-82	1982-84	1979-82	1982-84
		Thousands						*Percent*						
United States	3,140	104,993	110,355	113,495	98,912	99,663	104,959	5.79	9.69	7.52	5.11	2.85	0.76	5.31
Metro	735	81,140	85,343	88,210	76,524	77,421	81,983	5.69	9.28	7.06	5.18	3.36	1.17	5.89
Nonmetro	2,405	28,853	25,012	25,285	22,388	22,242	22,976	6.14	11.07	9.13	4.86	1.09	−0.65	3.30
The South	1,397	30,925	33,683	35,170	29,296	30,606	32,585	5.27	9.14	7.35	8.92	4.41	4.47	6.47
Metro	330	21,058	23,157	24,427	20,023	21,246	22,850	4.91	8.25	6.46	8.97	5.48	6.11	7.55
Nonmetro	1,067	9,867	10,527	10,743	9,273	9,360	9,735	6.02	11.08	9.38	6.68	2.06	0.94	4.01
Farm-dependent	235	1,123	1,197	1,227	1,052	1,071	1,108	6.32	10.53	9.70	6.59	2.51	1.91	3.45
Manufacturing-dep.	366	4,446	4,661	4,733	4,180	4,090	4,293	5.98	12.25	9.30	4.84	1.54	−2.15	4.96
Mining-dep.	114	888	982	947	832	879	836	6.31	10.58	11.72	10.70	−3.66	4.65	−4.89
Appalachia	506	9,746	10,190	10,582	9,232	9,180	9,768	5.27	9.91	7.69	4.56	3.85	−0.56	6.41
Nonmetro	375	3,935	4,083	4,158	3,684	3,576	3,736	6.38	12.42	10.15	3.76	1.84	−2.93	4.47
Metro	131	5,911	6,107	6,424	5,548	5,604	6,032	4.53	8.24	6.10	5.09	5.19	1.01	7.64
Southeast	339	9,638	10,620	11,131	9,077	9,615	10,338	5.82	9.46	7.12	10.19	4.81	5.93	7.52
Nonmetro	239	2,431	2,619	2,668	2,279	2,314	2,431	6.25	11.65	8.88	7.73	1.87	1.54	5.06
Metro	100	7,207	8,001	8,463	6,798	7,301	7,907	5.68	8.75	6.57	11.02	5.77	7.40	8.30
Delta	221	3,742	3,954	4,057	3,507	3,544	3,654	6.28	10.37	9.93	5.67	2.60	1.06	3.10
Nonmetro	185	1,815	1,897	1,926	1,692	1,674	1,710	6.78	11.76	11.21	4.52	1.53	−1.06	2.15
Metro	36	1,927	2,057	1,131	1,815	1,870	1,944	5.81	9.09	8.78	6.75	3.60	3.03	3.96
Southern Plains	331	7,799	8,919	9,400	7,480	8,267	8,825	4.09	7.31	6.12	14.36	5.39	10.52	6.75
Nonmetro	268	1,686	1,927	1,991	1,618	1,796	1,858	4.03	6.80	6.68	14.29	3.32	11.00	3.45
Metro	63	6,113	6,992	7,409	5,862	6,471	6,967	4.11	7.45	5.97	14.38	5.96	10.39	7.66

[1]Metro and nonmetro areas are defined as of 1983.

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ing earnings in the late 1970's. According to this delineation over half (54 percent) of the 678 manufacturing-dependent counties in the U.S. are located in the nonmetro South, mostly in the Southeastern states (Figure 6). These manufacturing-dependent counties were particularly hard-hit by the 1980 and 1981-82 recessions. Employment in these areas decreased 2.2 percent during 1979-82, while nonmetro employment in the South increased 0.9 percent, and unemployment reached 12.3 percent in 1982, one percentage point above the southern nonmetro rate and 2.6 points above the U.S. rate. During the 1982-84 recovery, employment growth in the manufacturing-dependent counties averaged about 5 percent, slightly (0.4 percentage points) below the U.S. rate. But, the unemployment rate in 1984 still hovered around 9.3 percent, 1.8 percentage points above the U.S. rate and 2.8 points above the southern metro rate.

It should be noted that manufacturing is not the only dominant economic force in the nonmetro South. There are some 114 counties (out of 200 nationwide) where 20 percent or more of the income in the county was derived from mining in 1979. And, despite the dramatic decline in the importance of agriculture to the southern nonmetro economy, there remain 235 southern nonmetro counties whose economies are highly dependent upon farming (i.e., 20 percent or more of county income comes from agriculture). The mining counties are concentrated in the coal-producing areas of eastern Kentucky, West Virginia, and southwestern Virginia, and in the oil-producing areas of Texas, Oklahoma and southern Louisiana (Figure 7). The southern farming-dependent counties are located mostly along the Mississippi River Delta in Arkansas, Mississippi, Louisiana, and in parts of the Southeast (Figure 8).

The 1980's have not been very good years for the mining-dependent areas nor for the farming-dependent areas. The unemployment rate in the mining counties averaged 11.7 percent in 1984, 2.3 percentage points higher than the overall nonmetro rate in the South and 4.2 points higher than the U.S. rate. In the farming-dependent counties, the 1984 unemployment rate hovered at 9.7 percent, over 2 percentage points above the national rate. During the 1982-84 upturn in national employment (a period of 5.3 percent growth for the U.S.) the southern mining-dependent counties lost 5 percent of all jobs while the farming-dependent areas increased employment at slightly below 5 percent. These statistics appear to confirm that major problems of current global competition in energy production (both oil and coal) and in export markets for U.S. agricultural commodities are impacting on specific nonmetro areas of the South.

CURRENT SITUATION IN U.S. AND SOUTHERN AGRICULTURE

National Overview

The current financial distress among farmers, farm lenders and farm-based communities and regions is rooted in excesses induced by the inflationary conditions of the 1970's and exaggerated expectations of worldwide demand for farm products. These excesses have made it extremely difficult or impossible for many farmers to adjust to the radically different economic conditions of the 1980's. Throughout the 1970's, there was a rapid expansion of U.S. agricultural capacity as farmers took advantage of accelerating inflation and very low to negative real interest rates (the nominal interest rate minus the inflation rate) (Figure 9). The value of the dollar was also generally low, making American products relatively cheap, and the value of agricultural exports expanded more than fivefold during the period. Farmers responded to these favorable conditions by borrowing heavily to invest in new capital equipment, new and costly production techniques, and increasingly expensive farmland. Farm debt rose, on average, more than 10 percent a year and tripled by 1980. Land values rose even faster, creating the expectation on the part of both farmers and lenders that investment in agriculture would continue indefinitely to be highly profitable and relatively free of risk. In this environment of rapid expansion, U.S. agricultural production surged and agri-businesses and farm-based communities and regions prospered.

Unemployment Rates for Nonmetro Regions of the South

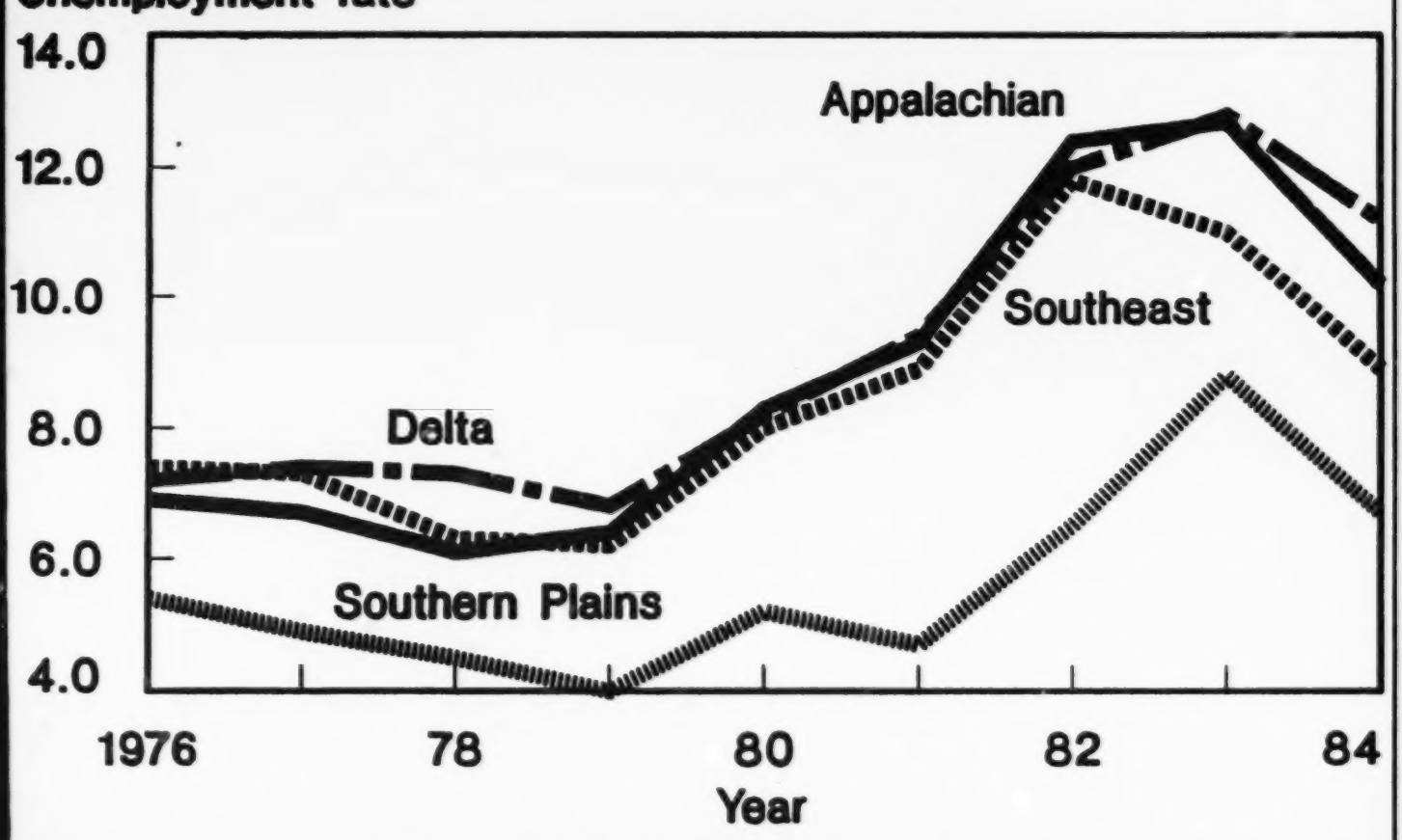

FIGURE 5

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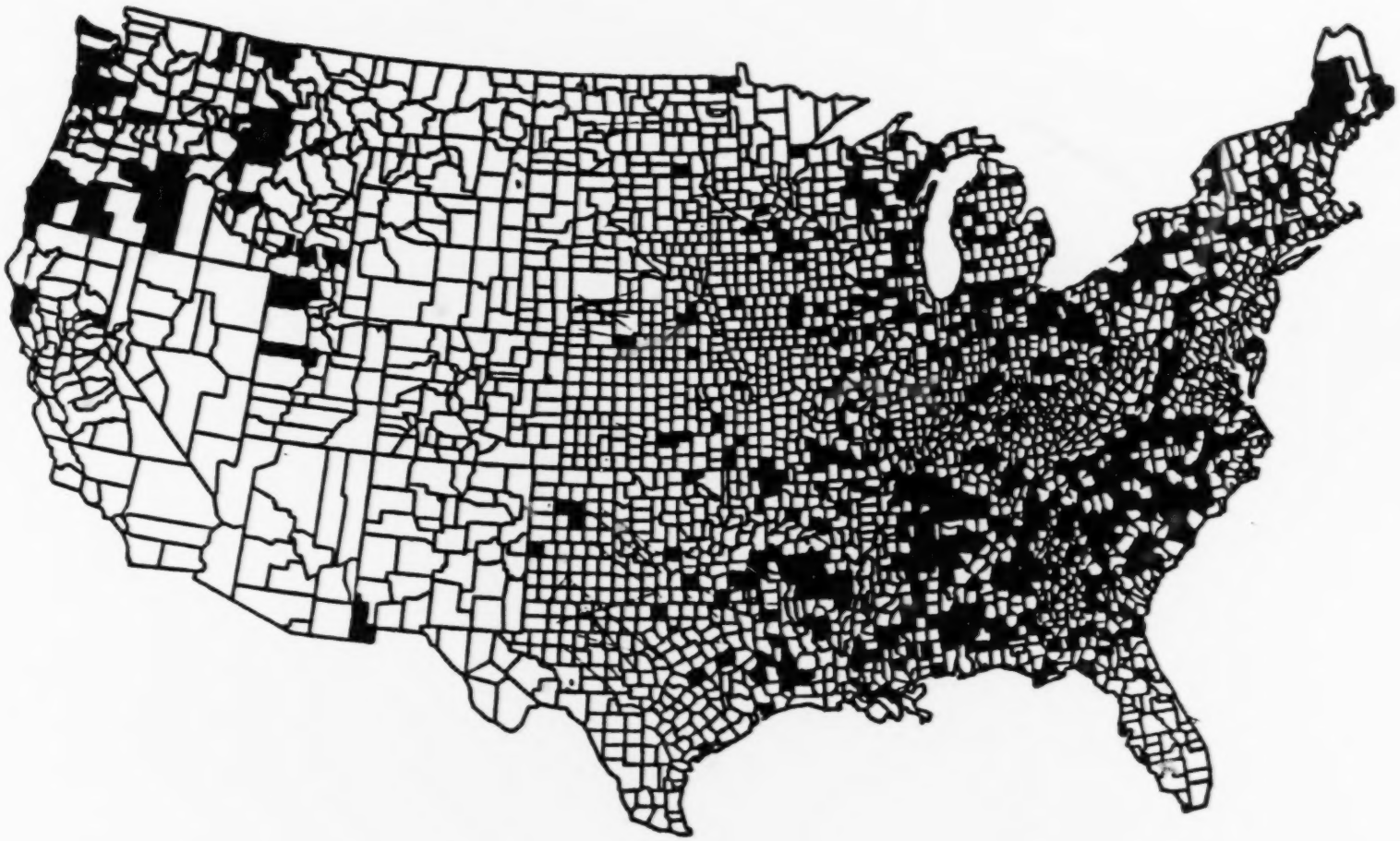
MANUFACTURING COUNTIES



51 COUNTIES NON MANUFACTURING MANUFACTURING 52

FIGURE 6

MINING COUNTIES

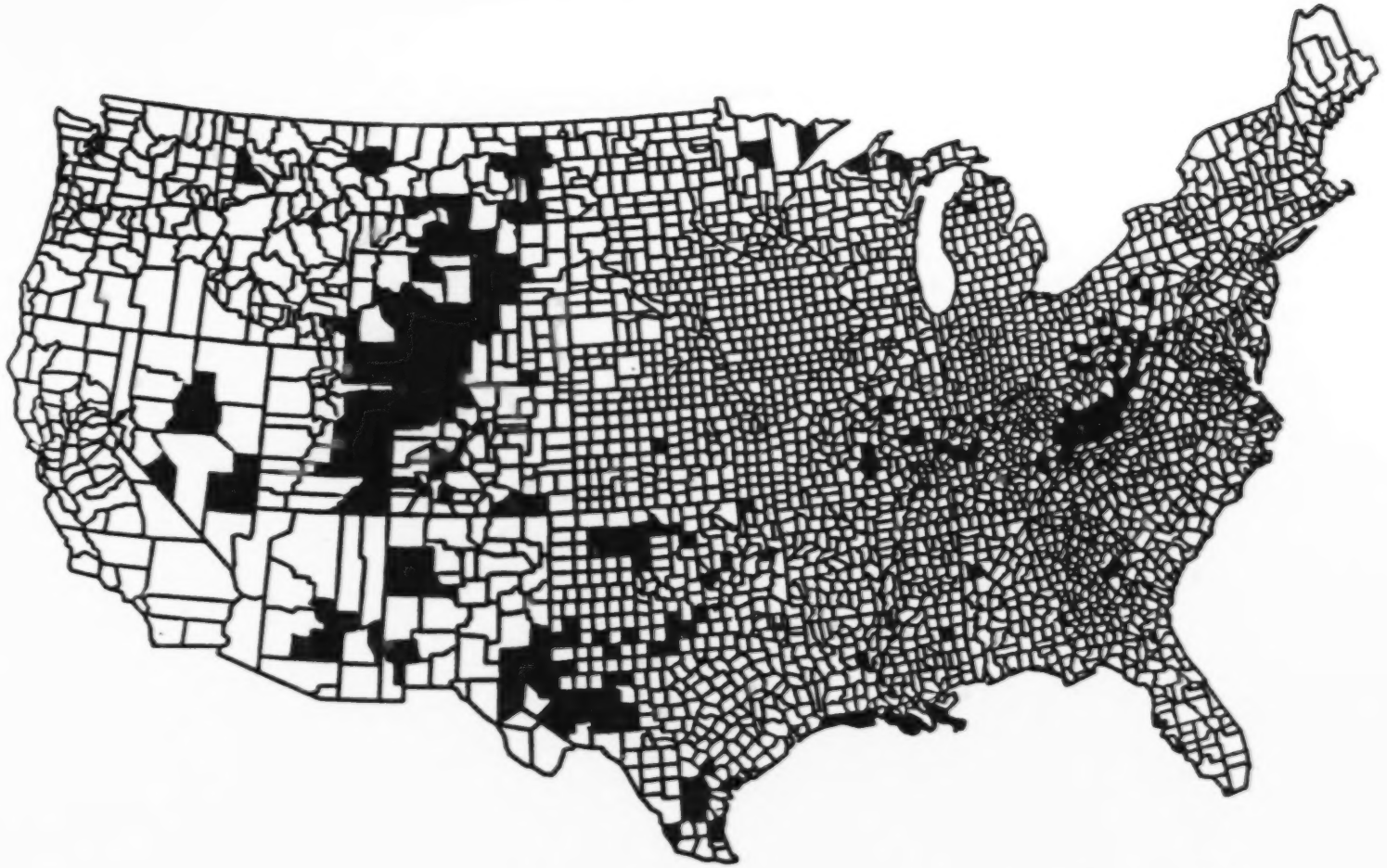


FIGURE 7

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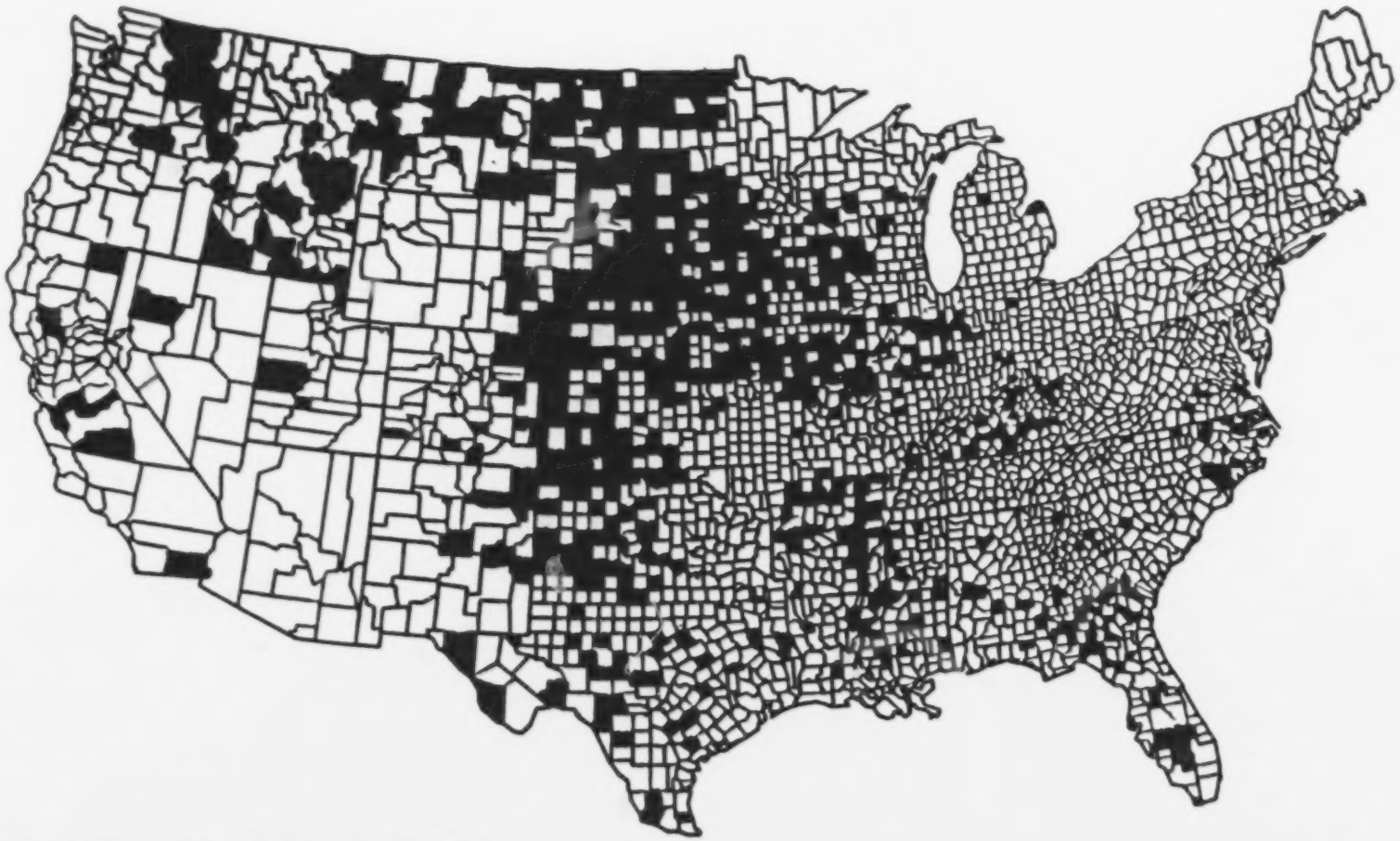
NONMETRO AGRICULTURE COUNTIES



702 FARMING-DEPENDENT COUNTIES

20 percent or more of total labor and proprietor income was from production farming/ranching during 1975-79.

NONMETRO AGRICULTURE

FIGURE 8

Major Economic Indicators in the U.S. Economy

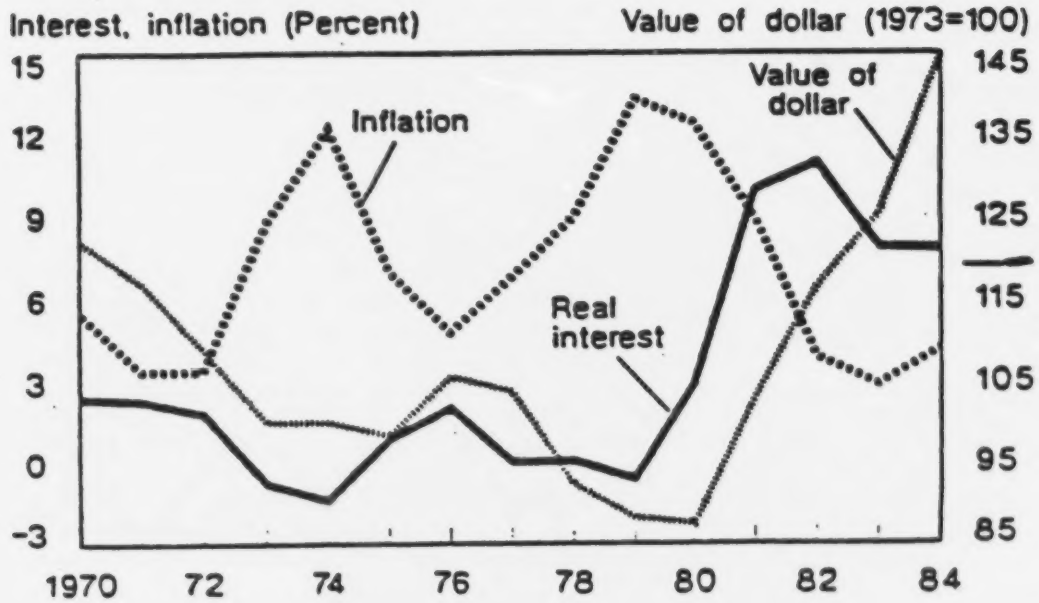


FIGURE 9

By the early 1980's, the factors that had given rise to economic expansion had reversed direction. Worldwide recession and the rise in the value of the dollar reduced the export demand for U.S. products. At the same time, relatively high loan rates for U.S. farm commodities, which set a floor under domestic prices of government supported farm commodities, provided incentives to other countries to substantially increase their grain supply. By 1984 these factors combined to sharply lower farm commodity prices, reduce farm income, and cut U.S. farm exports by 13 percent from the peak of 1981. On the cost side, farmers were hurt as inflation was slowed by stringent monetary controls, real interest rates rose to unprecedented levels of 8 to 10 percent, and prices paid by farmers began to exceed the prices they received. As net farm income plummeted, land values also declined because of expectations that returns to farming my be even lower in the future.[2] The debt levels that some farmers had incurred during the 1970's were no longer sustainable by their farming operations nor were they acceptable to their lenders in the changed economic environment of the 1980's. Farmland values in 1985 had declined 19 percent from their 1981 peak for the nation as a whole and values in some farm-dependent states and regions had fallen by almost 50 percent. As a result, many farmers who had borrowed heavily to purchase highpriced land and expensive farm machinery in the late 1970's found themselves approaching insolvency. For example, 7.3 percent of U.S. farmers in 1985 are very highly leveraged with a debt/asset ratio over 70 percent and some of them are operating under extreme financial stress.

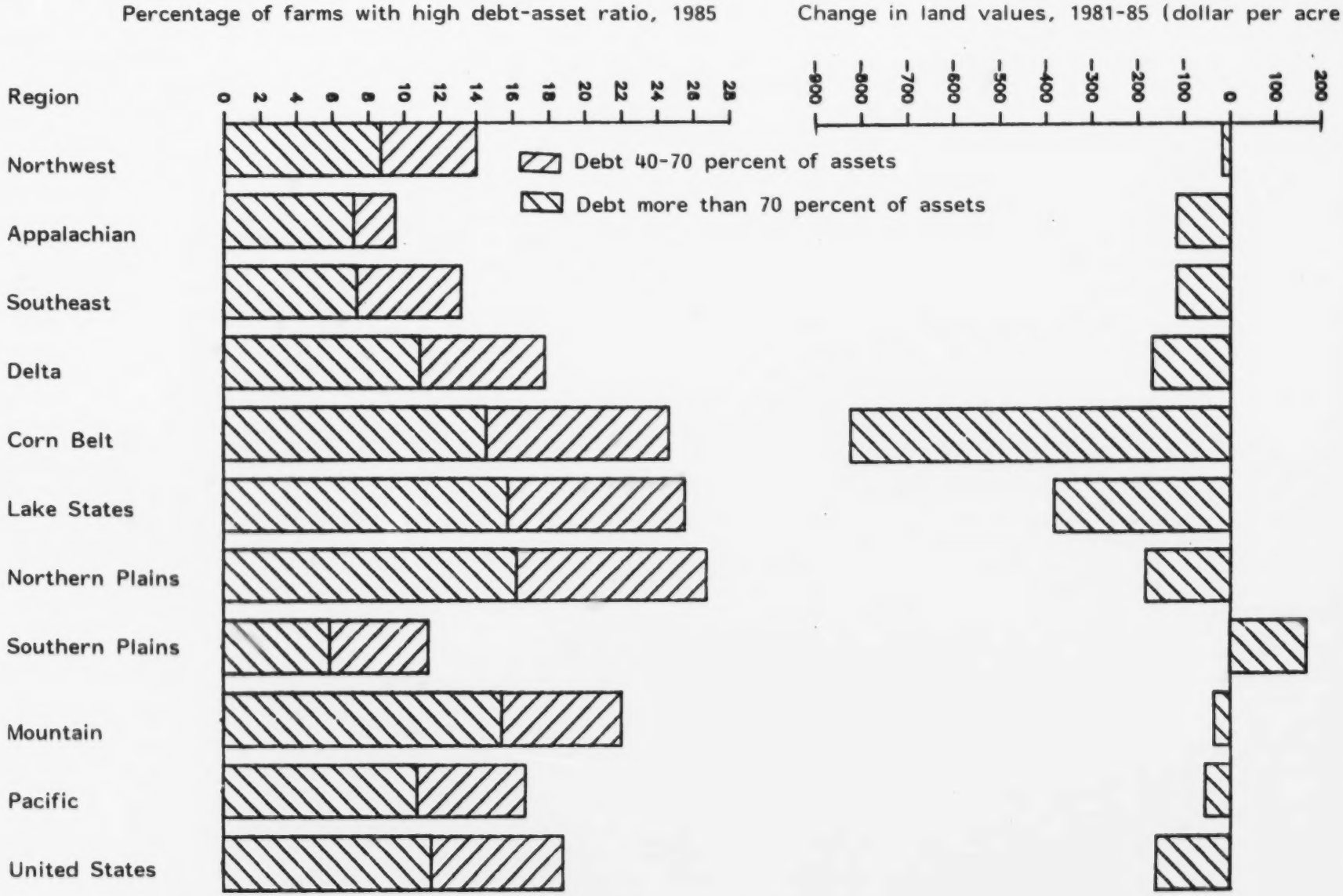
Economic Health of the Farm Sector by Farm Production Regions

Current debt/asset ratios and recent changes in farmland values are used to assess the economic health of the farm sector. The ratio of debts to assets is one of the primary indicators of a farm's overall financial soundness. Typically, farms are considered to be highly-leveraged if their debt/asset ratios reach 40 percent. At this degree of leverage, farmers start having problems meeting principal repayments, but they still have adequate net worth to collateralize loans. At debt/asset ratios of 70 percent, many farmers start having problems meeting both their principal and interest commitments. If their net worth continues to decline (because of falling land values), many of these farmers will approach insolvency.[3]

USDA's Farm Costs and Returns Survey, conducted in the spring of 1985, showed that the Northern Plains, Lake States, and Corn Belt have the highest proportion of highly and very highly leveraged farms. In each of these farm production regions a fourth of the farms were saddled with debt/asset ratios of 40 percent or more (Figure 10). In the South, however, only about 13 percent of the farms were highly or very highly leveraged. This was more or less typical in all the southern farms ranging from 9.5 percent in Appalachia to 17.8 percent in the Delta. The low proportion of farms under financial stress in the South may be explained in part by the region's small number of cash grain and dairy farmers who have been particularly hard hit by lower commodity prices. The critical factor, however, has been the relatively moderate decline in southern farmland values which have precluded large reductions in asset values and thereby prevented large increases in debt/asset ratios.

U.S. farmland values increased 37 percent during 1977-81, and then declined by 19 percent during 1981-85. Largest declines in farmland values occurred in the Corn Belt, Northern Plains, and the Lake States, which incurred losses of 33 percent or more (Table 6). In contrast, farmland values in the Southeast, Appalachia, and Delta declined less than 15 percent; and, in the Southern Plains farmland values actually increased some 29 percent. Whereas state-to-state percentage increases in farmland values during the earlier period tended to be somewhat uniform, declines since 1981 have been dramatic only in the major farm states of the Midwest. In Iowa and Nebraska the average value per acre of farmland has dropped more than 45 percent; in Arkansas and Oklahoma the average value per acre of farmland dropped only 19 percent. In the other southern states average declines in farmland values ranged from 18 percent in Mississippi to 6 percent in Florida and Virginia. It is apparent that regions of the Midwest, with high proportions of highly leveraged farms, currently have experienced the greatest declines in land values.

Figure 10 - Prevalence of highly leveraged farms and changes in farmland values, by region


Percentage of farms with high debt-asset ratio, 1985
Change in land values, 1981-85 (dollar per acre)
Region
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28
-900 -800 -700 -600 -500 -400 -300 -200 -100 0 100 200
Debt 40-70 percent of assets
Debt more than 70 percent of assets
Northwest
Appalachian
Southeast
Delta
Corn Belt
Lake States
Northern Plains
Southern Plains
Mountain
Pacific
United States

Source: Economic Research Service, U.S. Department of Agriculture.

Table 6. Value per acre of farm land by production region

Farm production region	Year				
	1977	1981	1985	1977-81	1981-85
	Dollars			*Change*[2]	
United States, total[1]	539	850	691	36.6	−18.7
Northeast	901	1,309	1,292	31.2	−1.3
Appalachia	690	1,043	927	33.8	−11.1
Southeast	715	1,097	982	34.8	−10.5
Delta	585	1,142	973	48.8	−14.8
Corn Belt	1,241	1,893	1,069	34.4	−43.5
Lake States	663	1,154	771	42.5	−33.2
Northern Plains	373	542	358	31.2	−33.9
Southern Plains	359	566	732	36.6	29.3
Mountain	231	365	330	36.7	−9.6
Pacific	774	1,354	1,300	42.8	−4.0

[1]U. S. totals do not include Alaska and Hawaii.
[2]Based on index of average value per acre, 1981=100.
Source: Economic Research Service, USDA.

The South which has experienced only slight decreases (or increases) in farmland values during the 1980's appears to have relatively fewer farmers undergoing financial stress.

Export-Sensitive Farm Commodities and Farm Sector Stress

Investment in the farm sector in the mid and late 1970's was spurred by the growth in the U.S. farm exports. During 1975-81, the value of farm exports doubled. Farm commodities contributing heavily to this growth included corn, wheat, soybeans, and cotton. These commodities accounted for about three-fourths of the growth in the U.S. farm exports from 1970 to 1981. Since their peak of 1981, exports of these commodities have declined 14 percent.

Decreased foreign demand, partly due to increased production by other countries, has reduced commodity prices and farm income. In states and communities where production of export-sensitive farm commodities is the dominant activity, reduced exports have translated into a slowdown in overall economic activity. This, in turn, has led to a loss of jobs and increased pressures for population out-migration.

Production of export-sensitive farm commodities is heavily concentrated in a few major producing states. In 1982, seven states produced 75 percent of the U.S. corn crop, 66 percent of the soybean crop, 57 percent of the wheat crop, and 89 percent of the cotton crop. Among these major producers, relatively few southern states are to be found. Although one can find Texas, Mississippi, Louisiana, Arkansas, and Alabama among the top 7 cotton producers with 54 percent of the crop, there is no southern state among the top 7 corn producers. Among the top soybeans and wheat producers there is only Arkansas with 5 percent of the soybeans crop and Oklahoma and Texas with 7 and 5 percent of the wheat crop, respectively. Within these major producing states, those communities which have little economic activity outside the farm sector must be currently hard pressed to find new options for future economic growth.

Overall dependence on export-oriented farm commodities is particularly acute in the Delta. Farm-dependent counties in this region are very dependent on commodities whose export markets had expanded rapidly during the 1970's, but declined substantially during the 1980's. In these areas export-oriented commodities accounted for 40 percent of all farm sales in 1982 (Figure 11). In contrast, sales of export-oriented commodities accounted only for about 19 percent of total farm sales in Appalachia, 18 percent in the Southern Plains, and only 14 percent in the Southeast.

Importance of Nonfarm Opportunities in Dampening Farm Stress

In 1982, 37.8 percent of all U.S. farm operators worked 200 days or more in off-farm jobs (Figure 12). But, in many farm-dependent areas such off-farm employment opportunities are not prevalent, or if they are, the structure of farming precludes farm operators from participation in off-farm employment. The lack of off-farm opportunities appears to be the case in the farm-dependent counties of the Northern Plains and the Corn Belt were the percentage of farm operators reporting off-farm worked was substantially below the U.S. average. In farm-dependent counties of the Lake States, the low percentage of farmers with off-farm work probably resulted from farm structure, that is, specialization in dairy operations. In the 4 regions of the South, on the other hand, the portion of farmers who worked off-farm was much higher than nationwide. This is a reflection of the prevalence of nonfarm alternatives brought about by changes in the industrial structure of the South during the 1960's and 1970's. It is also an indicator of how nonfarm job alternatives can dampen a region's or community's vulnerability to the current financial crises in farming.

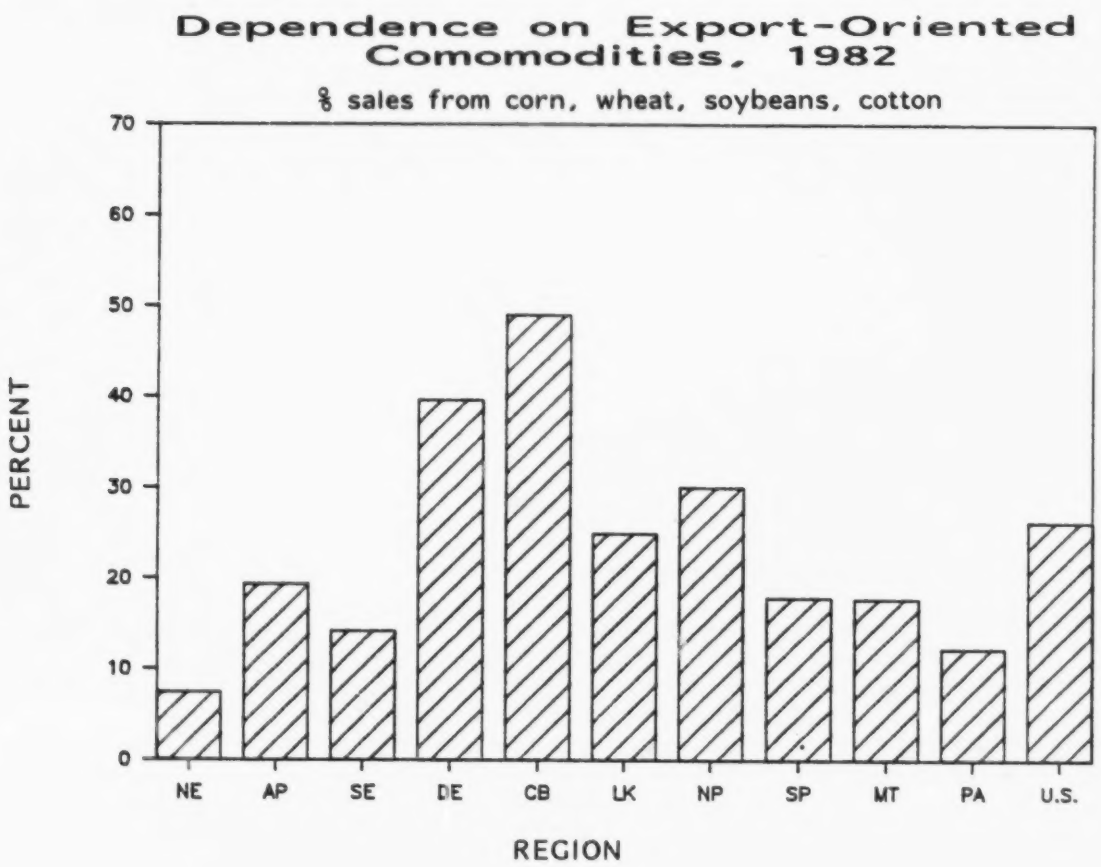

Dependence on Export-Oriented Comomodities, 1982
% sales from corn, wheat, soybeans, cotton
PERCENT
70
60
50
40
30
20
10
0
NE
AP
SE
DE
CB
LK
NP
SP
MT
PA
U.S.
REGION

FIGURE 11

Dependence on Off-Farm Employment
% operators working 199 + days off-farm
PERCENT
60
50
40
30
20
10
0
NE
AP
SE
DE
CB
LK
NP
SP
MT
PA
U.S.
REGION

FIGURE 12

PROSPECTS

Agriculture is still important to the nonmetro South but as an employer its importance has been dramatically reduced since World War II. Changes in agriculture no longer greatly alter the overall employment and population picture of the South. Agricultural employment accounted for only 3.2 percent of total southern employment in 1980. But, 235 southern counties still depended upon agriculture for their main economic activity. These farming-dependent counties are diverse with respect to farm products produced, farm size, and organization. In contrast to many other farm-dependent areas (particularly those of the Corn Belt, Lake States and Northern Plains), southern farm dependent areas, in general, have felt less stress from the current financial crisis largely because of much smaller declines in farmland values during the early 1980's. These smaller declines are due, at least in part, to less dependence on export-oriented commodities in most southern areas (some delta counties are an exception), the availability of nonfarm employment opportunities for farm household members, and probably more interest in using farmland resources for nonfarm purposes and/or for part-time farming.

At the household level, southern agriculture has benefitted from its close interface with nonfarm activities. The increased diversification of nonmetro areas in the South during the 1950's, 1960's and 1970's has dampened farm sector impacts in most of the South during the 1980's. Ironically, the viability of the manufacturing and mining sectors in the South is of utmost importance to the economic health of farm households and the farm sector in general. A large percentage of southern farm households rely on wages from other sectors to support farm operations in times of stress. But, many of the factors which lie at the roots of the farm crisis (the value of the dollar and international competition) are causing problems for southern manufacturing and mining. Many manufacturing jobs gained in the late 1970's by southern nonmetro areas were in the "import-sensitive industries" such as textiles and apparel. Some of these industries, given the changed economic environment of the 1980's, are currently stressed because of international competition.

The overall economic performance of the South has been strong during the first half of the 1980's (Table 7). But relative to the U.S. economy, the nonmetro south has slipped from its strong position in the 1970's. This slippage is due largely to problems in the basic industries such as manufacturing, mining, and farming which are playing a disproportionately large role in the nonmetro South. Some problems are clearly exacerbated by the strong value of the dollar; but, many are the result of the new global economy where the resources of land, labor, and capital compete in a truly international setting. That is, returns to U.S. farmland are in competition with returns to farmland investment in other countries. The same holds true for labor returns. For U.S. labor and farmland, current valuations are quite high relative to their valuation in other counties; for capital, higher expected returns from investments in the U.S., relative to those expected in other counties, have been at the root of the high values of the U.S. dollar during the 1980's.

The performance of the nonmetro South during the late 1980's will depend on its ability to compete in the international setting. It's success will depend in part on U.S. interest rates and how they affect the value of the dollar. But, southern economic success will also depend on changes in the overall efficiency of southern farms and nonfarm industries.

Table 7. Southern employment trends 1979-85

Region and State	Employment Change: Nov., 1971 - Sept., 1985		Employment Change: Oct., 1982 - Sept., 1985		Difference from U.S. unemployment rate	
	Total employment	Manufacturing employment	Total employment	Manufacturing employment	October 1982	September 1985
	Percent				*Percentage Point*	
Appalachian						
Kentucky	–3.5	–11.5	8.9	6.4	+0.3	+1.9
North Carolina	11.3	–0.1	12.5	5.9	–0.8	–2.8
Tennessee	8.8	–5.6	10.9	3.5	+0.7	+0.4
Virginia	14.8	0.6	12.7	5.7	–2.7	–1.7
West Virginia	–8.0	–29.2	–1.6	–9.0	+4.8	+5.6
Total	7.8	–4.5	10.6	4.7	–0.5	–0.5
Southeast						
Alabama	2.5	–3.0	6.3	6.8	+4.6	+1.1
Florida	31.5	11.4	17.5	14.8	–1.3	–0.5
Georgia	28.4	5.0	21.3	11.2	–2.7	–0.1
South Carolina	14.7	–5.6	14.3	4.1	+0.3	–0.4
Total	23.3	2.7	16.3	9.8	–0.5	–0.2
Delta						
Arkansas	7.8	–1.0	10.3	8.8	–0.8	+1.4
Louisiana	8.4	–18.9	–1.3	–11.1	+0.7	+3.7
Mississippi	1.8	–4.9	7.0	8.9	+1.8	+2.8
Total	6.5	–8.2	3.5	2.2	+0.6	+2.9
Southern Plains						
Oklahoma	8.0	–8.1	–0.8	–1.8	–4.0	–0.8
Texas	17.3	–1.4	6.3	–1.5	–2.9	+0.1
Total	15.9	–2.4	5.2	–1.5	–3.1	+0.1
South, total	14.5	–2.3	10.1	4.6	–1.0	+0.2
U. S.	8.9	–7.5	10.4	5.2	–	–

Source: U. S. Department of Labor, Bureau of Labor Statistics *Employment and Earnings.*

Footnotes

[1]See e.g., Lloyd D. Bender, *et. al.* The Diverse Social and Economic Structure of Nonmetropolitan America. RDRR-49, U.S. Dept. of Agr., Econ. Res. Serv., Sept., 1985.

[2]The 1983 USDa's Payment-in-Kind program helped net farm income to more than double in 1984, but this was only an aberration to the 1980's trend of declining net farm income.

[3]By definition, farms are technically insolvent when their debt/asset ratios exceed 100 percent.

INFRASTRUCTURE AND TRANSPORTATION

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Rural Transportation in the Future: Country Roads or Satellites?

DARYL HOBBS

INTRODUCTION

Transportation is important in economic development because it is transportation that is responsible for moving what we produce to markets. As transportation developments occur, they open up new opportunities for what is produced and where.

In the history of the U.S., new transportation and communication technologies have come along every few decades which have substantially modified the economic geography of the country. Early patterns of settlement and economic development were most influenced by water routes; later, with the emergence of railroads, new regions were opened up for agricultural and natural resource development; automobiles and continued refinement of roads reshaped the country even more; and then most recently, interstate highways and the proliferation of commercial air travel have influenced where, what, and how, goods and services are produced. Few would question for example, that improved accessibility, produced by the interstate highway system, has been a prominent factor in the recent industrialization and economic growth of the South.

Today another set of "transportation" technologies is emerging which may produce as much restructuring as railroads and interstates. We often hear that we are entering an "information age"; that is that many, if not most of us, are more involved in the production, distribution and use of information than durable goods. If the nation's economic geography was substantially reshaped first by railroads and then even more by highways, it is reasonable to expect that telecommunications and computer technologies will have a similar restructuring effect. The combination of these technologies, along with commercial air, have already contributed to what most have come to realize is a global economy.

Goods are generally moved by surface and therefore rather slowly. By contrast, information is usually moved electronically and therefore almost instantaneously. Consequently, it is usually cheaper and quicker to transport information than to transport people or goods. When more of what the economy is producing is information, then communication becomes as much of a consideration in the location of economic and social service activities as transportation. We will conclude with some implications that can be drawn from substituting communication for transportation.

Professor of Rural Sociology, University of Missouri

Centralization and Decentralization

To place anticipated social and economic changes likely to be produced by new transportation and communication systems in perspective, it seems useful to first briefly review how significant the changes attributable to the transportation and communication technologies of the past 25 years have been.

Alvin Toffler, in his book **The Third Wave**, points out that one of the major themes of the industrial era of this century has been centralization. Transportation technologies have made it possible to consolidate and centralize production, management and institutional activities to take advantage of economies of scale. But those same technologies enable decentralization of activities as well, if other cost considerations prove advantageous.

For some, economic activities costs other than transportation, such as regional differences in wage rates, influence economic location decisions. The same transportation improvements that make greater centralization possible also facilitate decentralization if cost or other locational considerations favor that option. A result has been a substantial relocation of both economic production and social service activities during the past 3 decades--some becoming more centralized (rural schools, health care services, retail trade, etc.) and others more decentralized (manufacturing plants and, in some regions such as the South, the population).

From 1960, with development of the interstate system, rapid development of commercial air, and substantial improvements in telephone and other telecommunication services, both economic activity and the population began to disperse. Access to markets and a large labor force was no longer as much of a constraint and both population and economic enterprise became more free to locate on the basis of other considerations.

Thus, improved transportation technology made possible, and will probably sustain, a pattern of separation of where people live from where they work or even where they obtain services. This first became evident around cities with the emergence of suburbs. More recently this pattern has contributed to metropolitan sprawl and the emergence of commuting to work outside the community as a form of economic adaptation for many rural residents. The decision of General Motors to locate the Saturn plant, expected to employ 6,000, in a community of 1100 is clear evidence of how the factors of production have come to be assessed from a regional, rather than a local, perspective. Such a locational decision would have been highly unlikely 25 years ago.

Consequences for Rural Communities

The non-metropolitan South has been substantially influenced by both centralization and decentralization. Rural communities have been affected as services such as schools, health care, and retail trade have become more centralized. A major result has been that rural communities have experienced significant change in the purposes they serve over the past 50 years. An equal or greater number of people continue to live in small communities; but people who live there tend to work, shop, go to school, and utilize services located somewhere else. The many tiny rural schools were replaced by consolidated schools, with a bus system becoming a prominent feature; many small town family doctors have been replaced by regional hospitals and clinics; many main street stores have lost out in the competition with regional shopping malls; residents commuting to work outside the community has become a major component of the economic base of many small communities.

The connecting thread of the non-metropolitan social and economic service system thus became the private automobile and the public investment in roads and highways that made it possible. An earlier necessity for many to move to where the jobs and services were located, was replaced by an option to stay put and travel to jobs and services. Had that option not been available it is reasonable to expect that there would have been a dramatic reduction of the rural population throughout the region instead of the rural population growth of the past 2 decades.

Some of the more obvious consequences for the non-metropolitan South include: (1) a diversification of the rural economy, (2) a substantial change in function of many small communities from being relatively autonomous to becoming highly dependent and (3) a blurring of many, once prominent, distinctions between rural and city life.

Emergence of New Industries

In a relatively short time span, improvements in conveyances and travel technology, especially interstates and airlines, have contributed to the emergence of a major growth component of the region's economy. Frequent travel for business and recreation has become a national norm giving rise to what has clearly become a travel industry. Entire travel communities, with concentrations of hotels, restaurants, business and recreational services began to emerge. Airlines are the umbilical cords of this industry.

The South, including rural localities, has experienced the effects of the emergence of the travel industry to a greater extent than other regions. A recent publication reported for example that the vicinity of Orlando, Florida will soon surpass New York City in number of hotel rooms.

Changes in How Production Occurs--Blending of Technologies

Transportation developments, along with computer technology have contributed to substantial modifications in how economic activity is structured, organized and distributed. The automobile industry is a good example of such restructuring from the large centralized production plants of the 50's to the widely dispersed component and assembly plants of the 80's. "Demand inventory' and "dispersed sourcing" have become the pattern in the auto industry to such an extent that interstate highways have become the "warehouse" of component parts moving to assembly points. But that pattern of production is as dependent on advanced, relatively inexpensive, and dependable communication as transportation. It is a linking of travel, communication, and data processing and coordination technologies that have enabled substantial modification of how and where automobiles and their components are produced. Transportation is no longer an autonomous function in the production and distribution process, it is mixed with other technologies so that transportation, communication, and computer technologies are blended--goods, and information about those goods, are being simultaneously transmitted.

These few examples suggest how transportation and communication technology have contributed to modifying rural communities, changing concepts of schooling, health care, and retail trade, creating new patterns of settlement, e.g. suburbs and "metropolitan areas," generating new industries such as the travel industry, modifying where and how goods production occurs, as in the case of the auto industry, and have contributed to the emergence of a global economy. All these effects and more are clearly visible throughout the South. Most of these changes have occurred most visibly during the past 25 years.

Implications for Growth, Development, Infrastructure Decisions

More complex marriages of transportation and communication technologies are forthcoming. It is doubtful if there will be revolutionary changes in either surface or air travel in the near future, but what does promise to change dramatically is increases and economic significance of communication, with computer technology as a necessary feature. Just as the interstate system and commercially significant air travel modified the role of railroads, and other formerly dominant transportation technologies, so too might it be expected that telecommunications and computer technology will contribute to restructuring of much economic and service attaining activity.

1. Some Probable Directions of Growth

Much of what influence major highway improvements are likely to have on the location of economic activity has probably already occurred. Indeed there appears to be a substantial risk of losing some of the industry that moved to the region in the past, motivated at least in part, by transportation improvements which made the region more accessible. Similarly the rural population "turnaround" of the 1970's, stimulated in no small measure by better roads, appears to be stabilizing as recent estimates show greater population growth in the metropolitan areas of the region.

But compared with other regions, it appears that the South will continue to gain in population and economic activity relative to the rest of the country, but these gains are unlikely to be uniformly dispersed.

Sales and Marketing Management (October 1985) reports the results of a survey projecting the metropolitan markets to grow most rapidly during the next five years. In their list of 25 most rapidly growing markets, 20 are located in either Florida or Texas. By contrast, **S&MM** project 25 negative growth markets--all but four of these are in the Great Lakes region.

A relevant feature of the expected metropolitan growth areas is that most are relatively small; only 2 have a projected 1989 population of more than one million; 17 have a projected population of less than 300,000. The new pattern that seems to be emerging is toward smaller city growth (Johnson, 1985). Smaller city growth appears to be a manifestation of a location preference compromise between the past massive growth of large metropolitan areas in the 1950's and 1960's and the reverse migration toward rural areas of the 1970's, which was motivated in part by quality of life considerations (Zuiches and Carpenter, 1978). The small city appears to be combining concentrations of support services and human capital associated with new forms of growth along with some of the quality of life features often associated with smaller places.

An implication of small metropolitan area growth for rural communities can be derived from the well established commuting to work pattern of rural residents. If a substantial part of regional growth in the future does occur in smaller cities, that growth can be expected to directly benefit small communities within a 50 mile radius of the "growth center". (Johnson, 1985). Because of the distribution of smaller cities across the region, significant growth in those localities would reduce the proportion of rural, "economically isolated" population in the region.

2. New Forms of Service Delivery

We mentioned above the emergence of telecommunications and computer technology making it possible to eliminate travel as a component of some social service delivery (e.g. education) and economic transactions. Implementations of these technologies has already begun, e.g. the electronic cottage, the satellite school, and is producing important implications for the location of both production and services. High technology concentrations are emerging in some smaller communities (Buck, et. al., 1984). Texas and Oklahoma are among states leading the way in offering satellite and computer assisted instruction credit courses at the high school level (Hobbs, 1985). Technology is thus making it possible to offer quality educational courses to small rural high schools as an alternative to consolidation and the additional travel consolidation makes necessary. In effect, some rural schools are making an investment in greater electronic linkage with the outside world instead of more school buses and drivers.

The implications of substituting communication for transportation in education, health care, economic transactions, etc. are only beginning to be observed. But it is clear that more of that substitution is forthcoming and will require adopting new perspectives on the part of state and local officials, planners, economic developers, etc.

3. Infrastructural Considerations

It is a feature of transportation and communication systems that they involve a combination of public and private investment. Generally, public investment has been oriented toward establishing and maintaining the routes and some support services, while private investment has been most concentrated in the conveyances and equipment. Public investments have been coordinated

and shared by all levels: federal, state and local. That sharing of investment is likely to continue for new forms of technology, and public infrastructure investments will surely influence the direction and course of economic and social development.

But new opportunities for infrastructure investment are occurring at a time when: (1) there has been substantial deterioration, and therefore need capital improvement investment in existing surface transportation routes (Reid and Sullivan, 1984), and (2) public budgets are relatively more limited than at any time during the past 2 decades. This situation confronts decision-makers at all levels with the proverbial "hard choices". What roads and bridges for example are most essential, for which purposes, and which ones might be taken out of service in favor of investments in emerging forms of transportation and communication? To what extent will emerging forms of economic activity in the region be as dependent on a capability of moving heavy freight, or will they be more dependent on telecommunications and rapid transit? These questions and many more like them suggest a need for more effective coordination and planning combining regional, state and local considerations.

Such planning and coordination will be especially important to the future economic and service well-being of rural communities. As Kay (1982) points out, rural localities are already transportationally disadvantaged in competing for economic activity and that disadvantage will likely be exacerbated as local funds become more constrained. Kay adds that deregulation has compounded some of that non-metropolitan disadvantage, especially as it pertains to air service. In addition, almost exclusive dependence on private cars as an essential component of rural service delivery (for example health care) has placed approximately 20 percent of the rural population who do not have cars, or are unable to drive, at a particular disadvantage.

However, planning for future transportation and communication infrastructure investments for non-metropolitan communities need not necessarily require a choice between investments to add or retain economic activity and those necessary to improve access to quality services. It is a feature of emerging technology in an information age, that the same technology to support new forms of economic activity can also have useful applications for service delivery.

Conclusion

Transportation and communication systems will continue to have a restructuring influence on the region, especially on non-metropolitan areas which have become heavily dependent on those systems to reach needed social and economic services and to participate in whatever economic growth and development the region will enjoy.

However, if rural localities are to avoid being left behind as a result of the transformations that are underway, we suggest the following:

1. Rural decision makers will need to have improved access to relevant planning information. Rural localities have been historically disadvantaged in this respect, but with current technologies, there is no need for that disadvantage to continue. State agencies and the Extension Service of land grant universities can take the lead in filling this need.

2. It is a feature of the current world that localities are even more interdependent than in times past. This creates a need for more coordinated planning and decision making. This need suggests consideration of new organizational forms involving active cooperation across agencies (local schools, health care providers and local government for example) and between various levels of public decision making. There is likely to be some value gained from more active public and private coordination as well, since communication technologies especially are significantly influenced by the "private" sector.

3. Regional planning and collaboration becomes even more important in serving the above needs. In addition, such features of modern technology as satellite instruction are not at all limited by state boundaries. A course produced in Oklahoma can just as quickly and effectively reach rural Georgia. If scarce infrastructure investment dollars are to produce the greatest benefit, duplication of investment should be avoided where possible.

Emerging technologies can contribute to overcoming some traditional rural disadvantages or, as some fear, the gaps could become wider. Past transportation developments have contributed to blurring many of the differences between rural and urban life styles, patterns of consumption, etc. but income and educational disadvantages remain. How emerging technologies affect rural localities will depend in part on anticipating their impact and coordination of effort.

On the Road Again? Infrastructure and Transportation in the Rural Economy

JEFFREY L. JORDAN

There is a direct link between the development of a transportation system and economic development. In fact, transportation in the most crucial factor contributing to the development of the rural South. Transportation capabilities and economic activity are highly interdependent; a structural change in one sector of the economy or the transportation system will induce changes in other sectors. Plant location decisions are based, in part, on existing and potential transportation systems. Conversely, transportation location decisions must take into consideration existing or potential demand. Investment encourages both the development of transportation systems and economic activity, while disinvestment in either component will diminish the viability of the other (Pratt and Thompson, 1979). Given the interdependence between the location of economic activity and the transportation system, the consequences of investment-disinvestment decisions in transportation facilities depend on the industrial structure of the state.

When addressing the transportation needs of rural areas however, planners often see the problem as access to a 4-lane highway. Currently plans for building more highways in the South are being proposed under plans for "developmental-highways." Although the federal highway system is a necessary component, transportation is more than roads. The links between transportation and economic development are more complex-less direct. No longer can a state or region simply put down a 4-lane, call that a transportation system, and go on to other areas. Transportation is a complex system of sometimes competing needs and interests which deserves renewed attention.

The purpose of this paper is to:

1. Examine some recent research on the links between highway access and economic development; and
2. Broaden the scope of the discussion of the transportation system and rural development.

Transportation Profile of Rural America

In discussing issues for the 1980s, Ira Kaye provided this transportation profile of rural America:

* In the next few years, nearly 23,000 miles of rail lines face abandonment or discontinuation of service, not including rail service affected by bankruptcies, mergers, or technological obsolescence.
* One-third of the rural road system has been removed from eligibility for federal aid-to-highway assistance, accelerating a decline in the condition of rural roads. Recent legislation has only slightly modified this condition.
* One-third of rural bridges are structurally deficient, 38 percent are functionally obsolete, 9 percent are collapsed, and 24 percent are posted against excessive weight.

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* Since 1965, over 114 small cities have lost scheduled air service and 189 others have had service suspended. Air line deregulation has accelerated this trend, increasing air fares to and from smaller communities. Some reversal of this is being seen as major airlines buy small commuter airlines and renew service to rural areas.
* Passenger rail service is available in few rural communities and intercity bus lines serve only 40 percent of towns between 2,500 and 10,000 population and 15 percent of towns and places under 2,500.
* Construction of the interstate highway system consumed vast amounts of the fiscal, technological, and available human resources. Consequently, rural roads and bridges became victims of what has been called "deferred maintenance." Only 33 percent of rural roads in the south were classified as in good condition in 1981.

All of these issues defy the response of simply building "developmental highways."

Beyond the 4-lane

In the development process, transportation is a factor of production and is not desired in its own right but for the service it provides in the production process. The demand for transportation is a derived demand-derived from the level of economic activity in a region or state. Thus, transportation is not a final product but an intermediate service.

Historically there has been a strong link between highway access and development. When asked in a recent interview about the state's role in alleviating the economic disparities between metro and nonmetro areas, Georgia's Commissioner of Industry and Trade said one role "...is providing infrastructure. One of the first things that comes to mind is increasing the access to these areas, and that leads, of course, to the developmental highway program that has been proposed." Noting the uncertain place of roads in development, Commissioner George Berry went on to say, "it is quite obvious that increased highway capacity is a factor, but not the overriding factor in determining economic growth" (Georgia Trend).

In assessing the role of interstate highways in the growth of employment in the rural south, the Southern Growth Policies Boards' report indicated that highways appear to have a positive influence on growth, but mostly only in those nonmetro counties that are adjacent to metro areas. The report found that remote counties, with no direct access to interstate highways, were the second fastest growing nonmetro areas (Rosenfeld, et al.).

A recent study at the Federal Reserve Bank of Philadelphia (Carlino and Mills) examined how public policies affect county growth. Among the policies investigated was the development of the interstate highway network. It was hypothesized that the highway system, by increasing accessibility of areas to markets would lower costs in both the money and time for travel. Thus, increased accessibility should stimulate local growth. The study estimated that a 10 percent increase in a county's interstate highway density would lead to only 0.5 percent increase in total employment with only 0.1 percent increase in manufacturing employment. Both estimates were not significantly different from zero.

Highways that provide access to communities 20 to 30 miles from and urban area may also have unintended income transfer affects (Berentsen). A 4-line highway provides two way access between metro and nonmetro areas. Not only will traffic flow from the metro area, but income and employment will flow from the nonmetro area. A highway will be used by many rural residence to work and spend in the metro area, transferring income away from the nonmetro area.

Other Transportation Issues

If the link between highway access and economic development is unclear, how can planners affect rural growth? Far more attention needs to be paid to the role of rail and air transport services as well as the conditions of rural roads and bridges, rather than super highways.

Most rural areas depend on agricultural and agribusiness industries for their economic base. Further, agriculture depends on transportation to move commodities to targeted markets. The dependence of agriculture on transportation varies by commodity. Some commodities depend

on rail movement while others rely on trucks. As Casavant and Scheuneman note, every dollar saved on transport cost is a direct return to the producer. Every market opened or old market obtained, due to an efficient and accessible transportation system, is another avenue for economic returns to the rural community.

The ability of agricultural producers to remain competitive in targeted markets is being threatened however, by the abandonment of rural rail lines and the merger of railroad companies. A large proportion of the rail lines being abandoned are rural branch lines that serve agriculture. This abandonment increases the cost of marketing agricultural products by forcing producers to find alternative transportation modes. Producers must either truck commodities to distant rail facilities or transport their commodities entirely to the targeted market by truck. In both cases, the cost of transportation increases, and the ability to compete with other regions is diminished.

Since the Staggers Act of 1980 deregulating the rail industry, railroads have been given more freedom to abandon money-losing lines or merge with other rail firms. Parallel mergers (consolidation of railroads operating on parallel routes) reduce the number of competitors in a market. End-to-end mergers often have the same effect since some connections are lost. Mergers increase the market power of the merged railroad, raising monopoly rents or reducing managerial efficiency (Keeler).

Rural Roads and Bridges

In addition to major highways, development planners should be concerned with the condition of rural roads and bridges that serve nonmetro areas. Over 83 percent of total road and street mileage in the South has been classified as rural by the Federal Highway Administration (Cosby) (Table 1). Except for Texas and Florida, all southern states have over 80 percent rural mileage; with Arkansas, Mississippi, and Kentucky having over 90 percent. These roads are predominately a local and state concern. Nearly 64 percent of rural roads are locally controlled and almost 35 percent fall under state jurisdiction (Table 2). Over 67 percent of these roads are classified as local roads, providing access to rural resources, farms, and residences.

As noted by Cosby, American roads are predominately in poor condition. Only 33 percent of the rural roads in the South were classified as good in 1981. Conversely, nearly 73 percent of southern interstate mileage was rated in good condition in 1981. The conditions of rural bridges are in similar disrepair. Nearly 48 percent of all southern bridges are deficient with almost 64 percent of the nonfederal-aid system bridges in the South in the deficient category.

Besides obvious safety problems, the deteriorating condition of rural roads and bridges has a significant impact on rural areas through the movement of agricultural commodities. Ongoing research at the Georgia Experiment Station has identified deficient rural roads and bridges as an important determinant of the quality of perishable commodities delivered to markets. When roads are potted and worn, the bumps over which trucks pass produce vibrations that harm the quality of fresh produce. As roads and bridges are closed or too small for large trucks, the time it takes to move fresh produce from the farm to a packing facility in increased. This increased time means that produce that must be cooled to insure quality remains in unrefrigerated trucks, often to the point of permanent damage. The ability of farmers to compete in targeted markets is decreased due to poor produce quality.

Conclusions

As state and local planners look for ways to promote economic development in nonmetro areas, the emphasis should move away from "developmental highways" to a concern for rail accessibility and the condition of rural roads and bridges. The items that require further analysis include:

1. Further work on the transportation-development link.
2. An inventory of rural road and bridge conditions.
3. Strategies to address rail abandonment issues, including local participation.
4. The ability of rural areas to sustain transportation service such as rail branch lines.
5. Methods to share the costs of rail, road, and bridge maintenance between communities and states.
6. Better information on the demand for transportation services in rural areas.
7. Further understanding of the transportation-communication link. Some substitution effects will occur as communication technology makes distance less a development factor.

TABLE 1

Rural and Urban Road and Street Mileage in the South, 1981

State	Rural	Percent of Total	Urban	Percent of Total	Total
AL	73,521	84.27	13,719	15.73	87,240
AR	69,252	90.21	7,512	9.79	76,764
FL	61,992	63.79	35,194	35.21	97,186
GA	88,645	85.03	15,608	14.97	104,253
KY	61,849	90.38	6,580	9.62	68,429
LA	46,707	82.41	9,969	17.59	56,676
MS	64,449	91.49	5,993	8.51	70,442
NC	77,532	83.74	15,055	16.26	92,587
OK	98,484	89.57	11,462	10.43	109,946
SC	55,524	88.51	7,207	11.49	62,731
TN	71,580	85.73	11,917	14.27	83,497
TX	211,789	78.95	56,464	21.05	268,253
VA	52,411	81.03	12,272	18.97	64,683
South	1,033,735	83.19	208,952	16.81	1,242,687
U.S.	3,220,684	83.60	632,013	16.40	3,852,697

Source: P. Cosby. SRDC Bib. Series #18, July 83.
Highway Statistics, Federal Highway Administration, 1981.

TABLE 2

Rural Road Mileage in the South by Jurisdiction 1981

	Local		State		Federal		Total	
	Mileage	Percent	Mileage	Percent	Mileage	Percent	Mileage	Percent
AL	62,943	85.61	10,281	13.98	297	0.41	75,521	100.00
AR	52,356	75.60	15,228	21.99	1,668	2.41	69,252	100.00
FL	31,807	52.92	29,185	47.08	–	–	61,992	100.00
GA	72,295	81.56	16,350	18.44	–	–	88,645	100.00
KY	38,076	61.56	23,452	37.92	321	0.52	61,849	100.00
LA	30,978	66.32	15,192	32.53	537	1.15	46,707	100.00
MS	53,817	83.50	9,660	14.99	972	1.51	64,449	100.00
NC	3,468	4.47	70,908	91.46	3,156	4.07	77,532	100.00
OK	86,248	87.58	12,236	12.42	–	–	98,484	100.00
SC	19,599	35.30	35,327	63.63	598	1.07	55,524	100.00
TN	61,579	86.03	8,873	12.40	1,128	1.57	71,580	100.00
TX	145,065	68.50	65,765	31.05	959	0.45	211,789	100.00
VA	763	1.46	49,001	93.49	2,647	5.05	52,411	100.00
South	659,994	63.85	361,458	34.97	12,283	1.18	1,033,735	100.00
U.S.	2,236,344	69.49	725,850	22.55	256,257	7.96	3,218,451	100.00

Source: P. Cosby. SRDC Bib. Series # 18, July 83.
Highway Statistics, Federal Highway Administration, 1981.

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The Role of Infrastructure in Rural Development

NANCY STARK

My role this afternoon is to talk about the role of infrastructure in rural development and, in doing so, to concentrate not on transportation and not on communications.

I would like to talk about the role of infrastructure, referencing examples in water and sewer, and then to talk in general about infrastructure. As a word of introduction, I am associated with the Council of State Community Affairs Agencies (COSCAA), a non-profit, membership organization comprised of state departments of community affairs. For example, in Alabama, the COSCAA member would be the Alabama Department of Economic and Community Development. The purpose of COSCAA is to address the common interests and goals of states with respect to housing, community and economic development and assistance to local government. Probably the association is most known for the involvement of state departments of community affairs, in the Community Development Block Grant Program. Most states are now administering the CDBG program and have been since 1982 or 1983.

Recently, COSCAA discovered more and more of an interest on the part of its membership in economic development and, specifically, in revenue enhancement and business expansion strategies in communities of less than 50,000. My remarks today will primarily address the role of infrastructure from a local perspective based on my 4 years experience with the National Association of Towns and Townships (NATaT), Washington, D.C. My background is in public finance, which is a local activity.

Historically and practically, much has been made of the connection between infrastructure, or community facilities, and economic development. Certainly there has been a perceived connection on the part of local officials especially local elected officials of small communities. In 1984, the National League of Cities and the U. S. Conference of Mayors did a joint study asking local officials to prioritize their infrastructure concerns. Their results ranked priorites as follows: streets and roads, storm water collection, wastewater treatment, sewage collection and public buildings.

The study went on to ask local officials why they chose these particular priorities. In doing so, it uncovered some interesting conclusions about small communities versus large communities. The elected leaders of small communities, meaning those of less than 50,000 in population, said the following: "We need these facilities to retain existing private sector jobs and to facilitate general economic development." They tied it immediately to economic development. Yet,

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larger city officials said, "We need these facilities and these services to protect general public health and safety and provide essential residential services." Apparently, the connection between infrastructure and economic development was made most strongly by local elected officials of smaller communities.

However tight this association is, we must realize that the connection between infrastructure and economic development is changing and enlarging. The issue no longer is getting money to build an industrial park, so that manufacturing operations will flock. A number of events have altered this connection. Let's review those quickly.

First, there has been an obvious change in the kind of businesses available for development. A great deal of research, policy development, etc. have shown rapid declines in traditional manufacturing industries--textiles (especially true in the South), apparel, steel, lumber, furniture. These changes are redirecting business attraction strategies away from manufacturing operations and toward service industries and businesses which use or produce high technology.

Associated with a change in the kinds of businesses available for development is an enlargement of the concept of infrastructure. Daryl Hobbs referenced this concept earlier, as he has done previously and superbly for the Southern Growth Policies Board. His work stresses that if attention is now directed to firms that produce services and technologies, we need to assure that the infrastructure created meets the special needs of those firms. This dictates a movement away from financing industrial parks and sites or emphasizing the low cost of production, which the South popularized several years ago. The new trend dictates an emphasis on softer infrastructure items like quality schools, a skilled labor force, community/social/recreational offerings, a clean environment, good close-in medical services and facilities. It doesn't mean that roads, bridges and the other hard stuff is no longer important. It does mean that additional ingredients have been added to the list.

Another event which has changed this connection is a perceptual phenomena. Slowly, very slowly, we are seeing some re-thinking on the part of small town leaders about what economic development means. When I was with NATaT, one of my biggest frustrations was to try to defeat the myth that local officials have about economic development as equaling business attraction. I can't tell you how many times, while conducting economic development training with small town officials, the participants thought entirely in terms of attracting a major business, and nothing more or less. A good example of this came to me from a local official in upstate Minnesota, where taconite mining boomed, and now busts. The community now has an unemployment rate of about 38%, considerably better than the rate of 82% in 1982. The mayor told me, with great glee, that he recently acquired a watts line and was telephoning many of the computer industries in the Silicon Valley of California talking to them about the benefits of relocating to his town of 2,000 people in upper Minnesota. It might be obvious to us that such an attraction strategy wouldn't be a good expenditure of funds, but it represents a pretty common perspective about economic development. I think that slowly, slowly these perspectives are changing. There is a growing re-thinking on the part of some local officials that other strategies may produce more fruit--like retaining existing industries, helping new, small firms to grow, assisting agribusiness or other firms that are consistent with the rural landscape, promoting tourism (when it can be profitable), natural resource-based economic development, entrepreneural training, and so on. A broader economic development view will de-emphasize the capital facilities side of infrastructure, and emphasize human resource infrastructure--entrepreneurial training, customized job training, small business revolving loan programs, marketing of small businesses, etc. Accommodations along these lines are quite different than building an industrial park with an EDA grant.

Unfortunately, little information has been gathered about the rural infrastructure problem and little current attention is being directed to rural issues, in particular. The many national infrastructure studies and commissions and projects being considered now are not focused on rural concerns. In 1984, a major national infrastructure study was commissioned by the Joint Economic Committee and resulted in a report titled **Hard Choices**. It was an excellent report documenting the huge financial gap that exists between the anticipated revenues of our nation and our infrastructure needs. **Hard Choices** shows that we have too little money to spend for the infrastructure needs that we know are present. However, the report did not recognize the needs and resource gap in rural areas, specifically. Recently, two infrastructure study groups were

appointed in Washington--the National Council on Public Works Improvement and the Private Sector Panel on Infrastructure Financing. Again, neither one of these entites is looking at rural facility concerns. Field hearings were conducted, and are still being conducted, by the House Public Works Committee on the National Infrastructure Fund. The Fund is a new financing initiative that looks very good, but again, no focus upon rural. The only exception that I am aware of is the Joint Economic Committee, which has been conducting a series of hearings on rural issues. The committee is planning a hearing on rural infrastructure in particular.

Of course, the problem with rural anything is the issue of numbers. When the bridge over Route 95 in Connecticut collapsed, it made the news in a big way. The collapse was an absolutely horrible thing, and it was particularly horrible in light of the number of people who could have been killed in a metropolitan area. The numbers are never quite as high and the tragedies are never quite as bad in a rural context. This is in spite of the fact that nearly 80% of all local governments have populations of less than 2,500. We are indeed a nation of small towns, but it is hard to document the severity of a problem when a bridge in rural Illinois falls down. It just doesn't have the same impact as a disaster on an interstate highway.

The only study recently completed on rural infrastructure was the National Rural Facilities Assessment Study, which was commissioned by the USDA Farmers Home Administration in 1978 to inventory the availability and condition of essential public facilities in rural communities of less than 50,000. Although the study fell far short of attaining its comprehensive goals, primarily due to the lack of funds, it still represents the most complete study of rural infrastructure to date. Principal findings of the study have been widely and well reported by Norman Reid of USDA Economic Research Service. Reid says, "while the national concern with infrastructure is on how to finance the repair of deteriorating facilities, the more immediate concern facing many rural officials may involve building facilities that never before existed. Rural planners are having to decide which facilities are most immediately needed, which technologies are appropriate, and how best to finance and manage the construction and operation of new facilities often with very little information." The study also found that "while populous rural communities have access to many of the facilities considered basic (water and sewer systems, fire protection, hospitals and the like), the less populous communities (unincorporated communities and towns of less than 1,000 population) have little or no access." This is a relevant finding in 1986, since these are the communities that are highly agriculturally dependent and are being pressured to diversify their economies. Such towns will have a very hard time diversifying if they have little or no public facilities to get started. So, we know that a major problem in exploring the role of infrastructure in rural development in that little information is available and little public attention is directed, specifically, to rural concerns.

Another primary issue relevant to examining this role is the general decline in federal resources needed to identify and finance infrastructure improvements. Let's look at the issue of federal decline and discuss what consequences it has for infrastructure and development in non-transportation and non-communication areas.

The first reality to reckon with is this: while there has been, and will continue to be, a decline in federal, and in some cases, state resources, the mandates and moratoriums associated with our environment have not been lifted. I am not advocating a lifting of environmental standards, but the conflict evident here must be examined. For example, the Federal Clean Water Act of 1977 says that municipalities have until 1988 to meet federal water quality standards. This mandate is set despite the fact that there is little or no funding available to help municipalities meet such standards. EPA construction grant funds are no longer available for new facility construction. This restriction may change, when the Clean Water Act is reauthorized (if it is indeed reauthorized, and if additional construction grants are released). But, the administration is extremely firm in its conviction that funds be used for current projects only. The thousands of communities that presently do not have facilities to meet the clean water requirements will not receive any assistance from the federal government. A similar problem exists on the state level. I recently chatted with a staffer in Representative Clinger's office. Clinger is a Republican representative from Pennsylvania. The staffer explained that numerous small communities in Pennsylvania cannot expand their sewer facilities to accommodate development, which they very much

need to provide new local jobs. In many such communities, the state has placed a moratorium on sewer construction. However, the same towns are not high enough up on the state's priority list to receive state assistance for sewer expansion. It is a Catch 22 situation. These problems are likely to have a significant impact on development. Adequate public facilities and a clean environment are amenities that people, households and businesses demand.

New federalism and the decline of federal money also means an enhanced state role in infrastructure financing. We have been talking about new federalism for a long time. Let's look at what it means for 1986. On a positive note, there are several new initiatives on the state level. For example, the Illinois State Legislature recently created the Illinois Infrastructure Assistance Program, part of a huge effort called "Build Illinois." In Pennsylvania, the legislature founded the Pennsylvania Business Infrastructure Development Program, part of an overall effort called the Pennsylvania Economic Revitalization Fund. These programs will finance business-related infrastructure, and they are very positive trends in state support. A number of states have also established state bond banks, which substantially reduce the cost of local borrowing for small communities. Bond banks now exist in six states and three more states are considering legislation to create them.

But, along with these positive developments are a few negative ones and Catch 22 situations. Often, infrastructure financing on the state level is directly tied to business development. In this way, funds are awarded not on the basis of need, but on the basis of whether business financing is committed to match the state investment. What exists is a Catch 22 situation. If a community cannot attract businesses, in part because it lacks necessary infrastructure, it cannot secure funding from the state to improve its infrastructure offerings. Such funding will not be possible unless the community receives a strong commitment from the business, which is an impossibility in this case. You get the assistance if you have the business in town, but you don't get the assistance if you are without a firm candidate, despite the fact that infrastructure may be the town's priority need.

I must admit, however, that tying limited public dollars to winable situations is not an entirely bad idea. Certainly the Economic Development Administration was not spending its funds wisely when it supported projects bringing water and sewer lines out to corn fields in rural areas, with the hope of creating industrial parts. But a compromise between these two extremes is very much needed.

Unfortunately, some state programs are geared to an earlier time when business attraction was the only development game in town and a manufacturing firm was the only type of business worth talking to. For example, most state administered-Community Development Block Grant programs permit direct loans to businesses for the purchase of equipment, land, construction and even working capital, in some cases. Such programs will also finance infrastructure improvements associated with business growth. But, many states continue to restrict such funding to manufacturing operations, especially those of particular standard industrial codes. They will not provide a direct loan or support infrastructure associated with a service industry. While states should be concerned with creating high quality jobs, and some sectors of the service industry are plagued with very low quality jobs, limiting funding to manufacturing concerns seems overly restrictive and counterproductive, given today's trends.

The final thing to realize about states is that, perhaps because of a lack of resources, few states commit time and attention to the role of infrastructure in rural communities. The major problems for states rest in metropolitan areas. Perhaps with the farm foreclosure crisis, we will start to see a change in this perspective.

Decline in federal aid means that localities will need to rely more and more on their own resources to finance infrastructure. This reality is something that we have heard for a long time, but it is a very difficult lesson for localities to learn. Local officials are psychologically oriented to grant programs, not loan programs, and geared to 100 percent grant funding, not a packaging or leveraging game which is the 1986 trend. With leveraging, the state will give you "x" dollars if the locality kicks in "y" dollars. A package must be put together. I find this pro-grant attitude a little ironic. In very rural communities, the people are generally very fiscally conservative, and yet they advocate the continuation of 100 percent grant programs. It is quite an inconsistency.

The move by localities to rely more and more on their own resources will produce several different effects. A positive effect is that the local beneficiaries will share the cost in infrastructure improvement, perhaps permitting local officials to better judge what their constituents actually want. The question posed to constituents is "What do you want to buy?" What the community wants to buy is what will be produced, not that which federal and state grants are available to provide. This is a positive development because federal money has not always resulted in buying the most cost effective system or the system that is most wanted by the small town citizenry. An example of this is the Environmental Protection Agency which, historically, has funded very large wastewater treatment facilities. We might ask whether smaller, more alternative systems would have better suited the needs of small communities, but the emphasis of the federal program has been on large wastewater treatment facilities, not on small, alternative systems.

The negative side of this trend is that communities do not always know what they want or what is appropriate. Furthermore, they may not have sufficient money and expertise to find out. Few communities have conducted inventories of their own community facilities. Leaders in rural communities will tell you that "x" land down a ways is available for industrial siting. Maybe Farmer Jones owns it, but they often can't tell you if it is definitely available, by what date, at what price, under what circumstances, and so on. Again quoting Norman Reid, "few rural governments, or urban governments for that matter, systematically evaluate their capital facility needs, schedule repair and replacement, or budget for facilities over their useful life." It is difficult to pursue development when you are unsure of your strengths and your weaknesses. It would be like me wanting a date with Robert Redford, not realizing that the chances of getting one are pretty slim.

Where does this lead us? The bottomline in seeding an enlargement of the definition of infrastructure, the types of businesses available for gorwth, and the changing federal role is that every party to the infrastructure decision is going to be forced to give a little.

On the federal side, we are looking at limited dollars and considering the best way to use those limited dollars. Obviously, the federal scenario is still unfolding in Washington. I agree with Norman Reid who says that the federal government should provide targeted assistance to communities that lack sufficient resources of their own to pay for basic, necessary services. Assistance should also be based on likely spill-over effects. Projects showing spill-over potential promote the well-being of the region, not just the well-being of an individual community.

State governments should continue to promote cost-sharing arrangements. Bond banks are an excellent idea, as is any arrangement where the state packages financing at better terms. Also, states play an important role in helping local government leaders map out economic development and infrastructure strategies. Good efforts, in my opinion, are state-sponsored certified cities/community preparedness programs, if they are accessible to small communities. Unfortunately, I have reviewed several programs that have so many hoops a community must jump through, and so many costs associated with them, that only a large community can afford to be certified. But if a small community go through certification, it is a very positive development. Such programs offer a systematic process of economic development and infrastructure planning.

State governments and Cooperative Extension offices have an important role in teaching local government officials about long-term fiscal decision-making. Communities may receive grants or loans to build public facilities, but what about the long-term operating and maintenance costs? Often rural communities do not think through their obligations. State government and Extension should continue to play a vital role in teaching fiscal planning to localities.

On the local level, communities will find it necessary to swallow hard and, when possible, commit scarce local dollars to economic development/infrastructure financing. Some rural communities will have the resources; some will not. Also, communities will need to search for alternative sources of financing. Foundations and corporations have, in some cases, helped communities to build community centers, provide fire protection, to carry-out all kinds of community efforts. Finally, localities should creatively use the state's resources, especially non-financial technical resources, to decide a direction for the community development future. Let me quote from my colleague Daryl Hobbs who said recently, "It is particularly important for

nonmetropolitan jurisdictions to decide what form of job growth is most attractive and most attainable before deciding which economic development-oriented infrastructures investments to make." Once priorities are formulated, infrastructure decisions may follow.

If these compromises are not made on the federal, state and local levels, the nation will watch as small agriculturally-oriented rural communities falter for lack of diversified economies. That is precisely not the way we want to go.

EDUCATION

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Institutional Foundations for Educational Improvement in the South

BRADY DEATON

Fifteen years have passed since Toffler's book, **Future Shock**, warned of the constant and accelerating change penetrating our personal life, creeping into our behavior and altering the quality of our existence. To survive, he warned, "the individual must become infinitely more adaptable and capable than before" (Toffler, p. 35). Even if Toffler's concern was a bit overstated, the range of social and economic forces that we are coping with today surely requires a reexamination of our ability as a society to produce more "adaptable and capable" people. Therefore, our attention turns to the institutions of society that produce human capital. Have these institutions been sufficiently responsive to the needs of the rural South?

My objective is to explore the role of education in the rural economy of the South. Particularly, my concern is to identify those factors which influence the supply side of educational provision in the South in view of the recognized need for educational change in the region. Indeed, the Southern governors have been in the forefront in recognizing the need for major shifts in the capacity of the educational systems to respond to the emerging economic and social environment.

My principal argument is that neither economists, educators, nor public decisionmakers have paid enough attention to the supply-side issues. Doing so requires that explicit recognition be given to the economic concept of human capital and to the supply of institutional innovations that will be needed to meet the educational needs of society, particularly those of the most disadvantaged numbers of the society. If my analysis is correct then we all have a major responsibility as educators in directing public attention to the principal factors that can lead to positive change.

In spite of extensive changes in the workplace, in the need for new knowledge to meet changing technologies, and in the need to understand emerging patterns of worker-management relationships, our schools are not responding with educational content or experiential learning that will provide an appropriate learning environment to meet these needs. As Charles Ruch recently stated, "schools are incredible resilient institutions, resistant to change in both structure and form--while desks have become more movable and textbooks more prevalent, the schools of 1984 look remarkable like the schools of 1894. The model of one teacher and twenty-five students pervades the educational enterprise" (p. 57).

Professor of Agricultural Economics and Associate Director of the Office of International Development, Virginia Polytechnic Institute and State University. Appreciation is expressed to Mabel Sequeira for her research support for this paper. I have drawn heavily on other research being undertaken by Kevin McNamara at Virginia Tech. J. Paxton Marshall provided a number of useful observations for which I am grateful.

The American Association of School Administrators estimated that "implementing all the recommendations in **A Nation at Risk** would increase school budgets an average of 27 percent" (Ruch, p. 58). The magnitude of these estimates coming at a time when New Federalism places local school budgets in a deadline pincer movement confronts us with a major paradox. The need for stronger educational programs is greater, but support from the federal level is weaker. On the other hand, such recommendations as longer school days are pale reflections of the more fundamental structural innovations that we need to see in our educational delivery system.

Ruch further points out that: "Nationwide in 1980, we spent $8600 to keep one prisoner in jail for one year and $11,500 to keep one child in a detention home for a year--but only $1600 per year, per child, on K-12 education" (p. 58). Hopefully, these figures do not reflect the relative value given to education. Yet, we should realize that relatively less spending on education today may result in the need for more spending tomorrow on detention homes and jails. Our society must squarely face the full implications of quality education. As Rawls stated the issue, education is the principal institution through which we shape our future.

Toffler was correct in asserting that "Parents look to education to fit their children for life in the future" (p. 398). Current public opinion polls re-confirm the view that the public stands ready to tax themselves to even greater levels in order to improve public education. Where are we failing then to bring about the needed improvements in institutional design and delivery? What seems so clear today is that educational innovations which can directly benefit the rural poor and disadvantaged stem to a large degree from our evolving value/ethical concepts of social justice as interpreted in the Courts. Needed changes as determined by our values may be severely impeded under the current restraints imposed by economic conditions.

Toffler argued that "education must shift into the future tense" (p. 427) and he provided several specific suggestions to guide that process: computer-assisted education, parental assistance in expanded settings, the use of mentors drawn from the adult population, part-time education combined with part-time jobs, etc. Today, we would add the serious concerns for adequate foreign language training and international relations which will be needed to face the complexities of increased global interdependence.

Perhaps a revolution in education is not what we need, but a new will and spirit of innovation and commitment to quality is needed. Education delivery stems from an alliance between parents, local schools, and the state and federal government on the financial and organizational level. Learning by the child rests on a foundation of trust and mutual nurture among parents, children and teachers at a totally separate level of social and family interaction. Neither alliance rests easy. These alliances depend, in each case, on mutual decisions about the balance of private (parents and/or children) and public rights, responsibilities, and benefits derived from education. Like most alliances, this one is marked by tension, sometimes mistrust, different agendas, and hard-won compromises.

Public education is important to the economic development of the rural South because of its amenity value and because of the human capital it produces. In this context, my concern is directed to public education, including the extension service and continuing education. Amenity value reflects the enhancement in the quality of life that good education makes possible. Informed, responsible, and spirited citizenships stem from high quality education. Business, industry, and agriculture will more likely prosper in areas that prove attractive to capital owners and their families. High quality education projects an attractive future and a spirit of optimism that appeals to the human spirit. Irrespective of the important role of education in upgrading the quality of the work force, the economic importance of the amenity value of education should not be overlooked.

The human capital aspect is reflected in a high quality labor and management force that promises greater productivity and work commitment to business and industry. Improved skills hold the promise of attracting higher quality business and industry in terms of pay, stability and quality of workplace. Research supports the view that the quality of education is attractive to manufacturing plant locations.

Schultz's Nobel Lecture identifies an important issue that should be a lesson to us. He argues that investments in the human agent "can significantly enhance the economic prospects and the welfare of poor people" (p. 7). Yet, he warns of the capital homogeneity assumption and of problems associated with aggregation of capital in growth models.

The discounted value of the stream of benefits derived from the public investment in education is, in fact, dependent upon the perceived improvement in well-being which people derive from it. These benefits may be more than income, and we may not measure them very well. The well-being which people derive from investing in themselves depends on political whims, macroeconomic forces, international trade, shifting comparative advantage of regions and communities, which are influenced by all the above, and by the changing environment of worker/management relationships. The latter may be undergoing significant changes today due to the growing number of foreign-owned firms in the South.

All this says that human capital analysis is fraught with uncertainty and must encompass analytically the dynamic force of interregional migration with its attendant private, public, and social costs and benefits.

Convincing evidence has been presented by both Rosenfeld and Hines in earlier sessions of this workshop that the economic face of the rural South is continuing to undergo rapid change that represents both a danger and an opportunity to its citizens.

Is it reasonable then to expect the educational institutions of the rural South to respond in a way that improves the economic and social prospects of the people of the region? Does education really matter that much? What policies will be effective in bringing about needed changes? The remainder of this paper addresses these questions.

THREE PROPOSITIONS

I will offer three propositions for our deliberations which identify dimensions of public education of concern to citizens and their elected decisionmakers:

Proposition 1: Schools Really Count, Parents Do Too!

This proposition is stated as a pointed counter to the Coleman Report which caught the public's attention with the interpretation that schools don't count, at least not much, in the educational attainment of children. The economic and educational backgrounds of parents were the dominant forces, and they may still be the most important! This view unfortunately diminished the attention given to improving our public schools. Fortunately, this interpretation was rebuked and evidence mounted from subsequent research to show that, indeed, schooling can be shaped effectively to improve educational output.

Later studies used different measures of the output of school production and held constant the recognized importance of specific student and family factors in order to measure the importance of controllable inputs on educational attainment (Burkhead). Other studies were corrected for biases in the Coleman study, due to non-responses. For example, after reanalyzing the original Coleman data, Bowles determined that teacher experience and teacher verbal test scores had significant influences on student standardized test scores. Perl found that teacher's starting salary, proportion of teachers with a graduate degree and/or specialization, class size, school library holdings, and the percentage of male teachers were all statistically significant determinants of student achievement. Burkhead also found teacher experience and beginning teacher salaries to be significant.

Katzman's study of students in the Boston school system revealed that the staff/student ratio, school district size, and proportion of teachers with masters degrees were important. Other researchers continue to add support to the notion that teacher quality and peer groups influence significantly educational achievement test scores.

If these results are correct, then the South may currently be at somewhat of a disadvantage vis a vis the rest of the country with respect to pupil/teacher ratio. Only three states in the South--Oklahoma, Virginia, and Texas--had pupil/teacher ratios below that of the nation in 1981-82 (Table 1). Ten Southern states were above the national average of 17.5 pupils per teacher.

The importance of parental input in their own families and volunteer input through PTA's has not been adequately recognized. According to McNamara, extensive research suggests that parental input is directly related to the verbal development of children. He states that reading to children had a positive influence on reading achievement, while watching television with children had a negative influence (McNamara).

Such learnings from research, of course, should be accepted with some caution. Nevertheless, they have the merit of being intuitively and emotionally appealing. Extension programs that address agricultural and rural economic development matters should call these results to the attention of county governments, school boards and state government officials. Such knowledge reduced uncertainty and provides guidelines for decisions that can alter the economic conditions of the poor and the disadvantaged in the South.

Economists such as Denison and Schultz and legal scholars such as Shepherd recognize the importance of the "public good" component of education in the U.S. From an economic standpoint the public good provides the rationale for the public commitment to financing education. In other words, public rewards and sanctions seek to insure that a socially acceptable minimum level of education is undertaken by all so as to insure economic growth, greater knowledge of citizenship responsibilities in a democratic society, and social stability.

From a legal perspective, Clark Spurlock boldly argues that it is important to "keep in mind the legal theory that schools are primarily for the protection of the state through their basic function of providing an informed and competent citizenry" (quoted in Shepherd, p. 71). Some judicial decisions have moved in the direction of linking educational access to "entitlement rights" as in the case of **San Antonio Independent School District V. Rodriguez**, thus reaffirming it as essential to the effective exercise of First Amendment freedoms. Yet, even the justification of these cases are based on the recognition of the critical importance of education to job attainment rather than simply to function as a good citizen. Again, quoting from the Rodriguez decision (1973), "The market place of ideas is an empty forum for those lacking basic communicative tools" (Shepherd, p. 71).

The commitment of parents to quality education for their children is reflected in the home, in the restrictions that parents place on the behavior of children, as well as learning opportunities provided for their children, in the volunteer time they are willing to give in order to enrich learning experiences at school, and in the taxes they are willing to spend to finance improved school programs. Local expenditures are important determinants of school quality and student achievement. McNamara and Deaton's research (1985) show that these relationships become clear when a four year lag period is allowed between the time of expenditure and the measured achievement of students. Other lengths of the lag periods may be more appropriate for measuring the ability of a school system to translate revenue availability into conducive learning environments in the classroom. Although further research on this issue is needed, school administrators can take heart from the available research on this question. Their actions are vital in fulfilling the trust vested in them by hopeful parents and public officials.

Table 1. Pupil/Teacher Ratios for Southern States Grouped by Compaison to National Average, 1981-82.

Below National Ave. (17.5)		Above National Ave. (17.5)	
Oklahoma	(15.9)	Alabama	(19.5)
Texas	(16.7)	Florida	(18.4)
Virginia	(16.5)	Georgia	(17.6)
		Kentucky	(19.1)
		Louisiana	(17.6)
		Mississippi	(18.0)
		North Carolina	(18.5)
		South Carolina	(18.1)
		Tennessee	(19.5)
		Texas	(19.5)

Source: National Center for Educational Statistics, U. S. Department of Education

Proposition 2: A greater public commitment to education is needed in the rural South because of greater economic uncertainty.

A greater public commitment to education finance may come from the local, state, or federal level, but come it must! As the economy of the rural South is buffeted by the forces of international market fluctuations, by momentary and fiscal policy, by business cycles, and by reduced safety net provisions, the jobs of rural people become more precarious. Rural communities, especially, simply do not have the same level of federal transfer funds that once provided a strong counter-cyclical buffer for their local economies.

Labor unions are also weaker today than in the past. Whereas labor unions played a vital role historically in protecting workers rights in the job market, their position has been significantly eroded, due partly to structural change in the economy and partly to changing managerial composition. New management practices brought in by Japanese and European firms may provide a different and unfamiliar structure of job security. Whether it will be better or worse for workers, remains to be seen.

Following Polanyi, I am convinced that the public responsibility of protecting society against the vicissitudes of the market will most likely be continued in one form or another. History suggests that the public will demand continued political involvement in the economy. The real argument is most likely to be over whether intervention by the public will be directed toward economic controls of business and industry or toward shoring up the human capacity to respond effectively to economic changes. Both recent economic history and current political trends suggest that the latter is most likely. Hence, we will likely experience a renewed public effort to address educational needs, to provide dislocation subsidies and retraining, and to stimulate greater entrepreneurial capacity; and the public should respond in this manner!

Although, the private sector role will grow in importance, it will not be adequate or appropriate to meet public needs.

Proposition 3: The quality and Level of Economic Activity in the Rural South Depends on the Level of Commitment We Are Willing to Make.

This is another way of saying that we will create whatever level of quality in society that we have the will to achieve. That quality is limited only by our own aspirations for our children and for the future of the region. I am speaking here in cold, economic terms. The flow of discounted net benefits to society is directly dependent on the level of investments of money and time made on behalf of school age children and on the nature of public decisions that transform tax revenues into an efficient school production system. Education creates the quality of future society. As Schultz warned, the importance of the "shifting sands of growth" --those macroeconomic factors discussed above--cannot be ignored. Nevertheless, the recognition that the future is, to a large extent, in our hands, should provide all the challenge we need to carry forward.

A few concrete suggestions can be made for public initiatives that could go a ways toward effectively shaping economic growth processes in the rural South:

1. Creative public-private sector cooperation is needed to identify, train and support entrepreneurship. The rural South should be in a position to benefit from the "entrepreneurial revolution." This requires human capital investments both in our primary and secondary schools and among the adult population.

Entrepreneurship requires what Dr. Edward de Bono calls "constructive aspects of thinking" in contrast to the traditional emphasis on "critical thinking." Instead of asking students "what's wrong with this or that," we need to be challenging them to think creatively about putting resources, finances and social ideas together in a new way. Dr. de Bono calls for a new curriculum in schools called "thinking"--his "Cognitive Research Trust."

2. A new commitment to continuing education and adult literacy is needed. A survey by the Center for Public Resources of 2,000 companies revealed that 75 percent of them had remedial programs to teach basic skills. The survey suggested that there is "a crisis ... smoldering beneath the surface of our troubled economy ... which involves the lack of basic academic capabilities (in reading, writing, math, science, speaking, listening, and reasoning) among high school youth and its detrimental impact upon the country (cited in Mark, p. 4).

   Table 2 provides information on the relative educational attainment of the adult population of the South at or above 25 years of age. For the U.S. only 18 percent of these adults had 8 years or less education in 1980. Only two Southern states, Florida and Oklahoma, were as well off as the national average in this respect. The other states of the South ranged from 21 to 31 percent of the adults 25 and older with 8 years or less education. Clearly, adult education programs will be required to improve the efficiency of the workplace as well as life quality for many in the adult population.

   The private sector has recognized this need already. Research by Smith, Deaton and Kelch found that firms located in rural areas of Tennessee and Kentucky reported no difference between their desire for workers with or without high school diplomas. The consensus was that the high school education didn't appear to make any difference in their capability. Most firms interviewed had developed their own compensatory basic education program tailored to meet specific industry needs.

   The recent article by Mark, "In Pursuit of Adult Literacy," **Lifelong Learning** (May 1985, pp. 4-5), cites a number of excellent examples of addressing adult illiteracy. The common theme is the need for partnerships among principal actors at the local level: business, educational leaders, churches, civic groups, labor, and vocational education institutions.

3. Educational opportunities must be provided for marginal and part-time farmers to obtain non-farm jobs. Consistent with the language in the 1985 farm bill, support is needed for farm operators and their children to use education programs as adjustment strategies. The extension service should join with vocational schools and two and four year institutions of higher education to design effective programs of education and job creation.

These specific suggestions may be initial steps toward a more comprehensive assessment of the role of education in the emerging economy of the South. Constant change in the economy will continue to require even more pronounced changes in our school systems. These modifications will come more slowly than desirable and the consequence will be continued low incomes, poverty and disillusionment for many members of our society. But this does not have to be the case. We have a growing base of research knowledge that can help improve life opportunities for our citizens. Combined with new, visionary leadership, we have the ingredients of hope and a new sense of optimism for the future of the South. The age-old problems of rural families with low incomes and limited job opportunities can be overcome if we have the will to grapple with these issues. I urge us all to do so!

Table 2. Educational Attainment of Adult Population 25 Years of Age and Older of Southern States, 1980.

State	State Percentage with 8 years or less	Percentage with at least 4 years school
Alabama	25	56.5
Arkansas	27	55.5
Florida	18	66.7
Georgia	24	56.4
Kentucky	31	53.1
Louisiana	25	57.7
Mississippi	27	54.8
North Carolina	25	54.8
Oklahoma	18	66.0
South Carolina	26	53.7
Tennessee	27	56.2
Texas	21	62.6
Virginia	22	62.4
U. S.	18	66.5

Source: U. S. Bureau of the Census: 1980 Census of Population, Vol. , Ch. C.

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Higher Education Resources Available for Economic and Rural Development

HELEN ROBERTS

I want to talk a little bit about the higher education resources that are available to work on economic development and rural development initiatives in the South. Then I will describe some of the roles that we see colleges and universities playing in rural development and community development.

The American Association of State Colleges and Universities (AASCU) is a higher education association representing the sector of colleges and universities that are four year public institutions. There are some 370 of these institutions in the United States: about a third of them in the Southern region--9 in Alabama, 7 in Arkansas, 7 in Florida, 14 in Georgia, 5 in Kentucky, 9 in Louisiana, 6 in Mississippi, 13 in North Carolina, 8 in Oklahoma, 3 in Puerto Rico, 9 in South Carolina, 7 in Tennessee, and 10 in Virginia. When you add to that the extensive system of locally-supported and state-supported community colleges, the state universities and land-grant colleges with their Cooperative Extension Services, including a dozen historically black land-grant colleges, and another dozen historically black public colleges, you have a true formidable resource in the South that can be applied to economic development problems. In addition, well over half of these institutions are actually located in rural areas and rural regions of the Southern states.

AASCU is working on a cooperative agreement with the Economic Development Administration to do a study on the role of higher education in economic development and also to hold a national conference on this topic. The conference will be held in April in Atlanta.

The study is an attempt to compile as much as is known right now about the various roles that higher education institutions are playing in local and state economic development. We surveyed the four-year public land-grant, non-land-grant institutions to find out more about what kinds of activities they were pursuing. Virtually all of them, 99%, indicated that they were experiencing increased demands to serve as a resource for state and local economic development. Seventy five percent of the respondents said that they are involved in specific programs related to economic development, and half see themselves as playing a significant role in the economic development of their community. This is especially true of rural institutions which are also significant employers as well as providers of services.

Before I mention the roles that we have identified for higher education institutions to play, I want to draw your attention to a most important concept contained within the report: **After the Factories: Changing Employment Patterns in the Rural South** by Stuart Rosenfeld and others. "Low educational attainment levels were once counted as an advantage in attracting low skill industries who did not want employees with high long-term economic aspirations... For service industries, many of which require educated and skilled employees, low educational levels are a disadvantage." But in fact the study found that the slowest growth counties have the lowest

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Director, Office of Urban Affairs, and Director, Office of Agriculture, Renewable Resources and Rural Development, American Association of State Colleges and Universities

completion rates at both levels of educational attainment, high school and college. This is in contrast to the findings of an earlier study and popular perception. Even manufacturing showed higher growth in counties where educational payments are higher. I think this alone tells us that elementary, secondary, and higher education suggest long term economic development strategy that is available to us. It's so simple and so plain, but it's a fact that educated people perceive and create opportunities that might not otherwise exist.

AASCU is compiling a clearinghouse of information on what colleges and universities are doing in economic development, and we have identified five roles which these institutions are playing. One is economic analysis and research. It is aimed at providing knowledge about an area of the economy and contributing to decisionmaking in all sectors. Western Carolina University has a Center for Improving Mountain Living which sponsored the Western North Carolina Tomorrow economic plan. Mississippi State University and the Southern Rural Development Center, in sponsoring this conference, are an example of what a university can do to convene policymakers and talk about conditions of the economy.

A second kind of contribution is in the area of human resource development, not only in terms of the classical education mission of the university, but in grassroots community development which occurs when higher education opportunities are provided through community organizations and groups of people who have not traditionally had higher education. In this category, community colleges play an important role and also, historically black colleges and universities are significant contributors. One interesting example we found in the course of our study was North Carolina A&T which has a fast food franchise on campus to train young entrepreneurs about owning their own business.

A third type of contribution is in the area of technical assistance. This, of course, is very well known to people who work in the Cooperative Extension Service. Management assistance and business assistance centers also help to apply knowledge in the business setting. The University of Alabama at Tuscaloosa made a direct intervention to keep plants from closing in Tuscaloosa. In this category, there are nationally more than 300 small business development centers at colleges and universities and some 40 EDA sponsored University Economic Development Centers.

A fourth area is Research and Development, also well known to the land-grant university since it is their mission. For example, Georgia Tech University has a research institute that provides both basic and applied research for businesses and industries.

The fifth area, and a new role for universities in economic development, is that of university industries, such as Research Triangle Park where higher education actually takes the initiative for developing new industry or new business.

One trend that we have observed very strongly in our study is that increasingly businesses, workers, and universities are creating partnerships and agreements to continuously train workers or to help workers make the transition from one job to another as economic shifts cause businesses to close. I think this is something that we will see more of in the future.

With regard to issues at the Federal level, I've noticed with great dismay that the USDA this month dismantled the Office of Rural Development Policy which was the focal point for discussing these kinds of issues. But, there is in the House version of the Higher Education Act a new title which is called the Higher Education and Economic Development Act, to provide funds for programs like these which work with communities and businesses in economic development through college and university involvement.

With regard to state policy issues, I commend to you a paper that was put out by the Southern Growth Policies Board a few years ago on "Education and Training and Industrial Policy." And, I would like to add just one concern to the list that Brady Deaton has given you in his fine paper. We need better coordination and cooperation between all sectors of education at the local level. We still have rural communities that have elementary and secondary schools with different boards, the community college has a different board, and the four-year college has a different board. They're all in different systems and they have different faculties. As educators, we have a responsibility to look at rural development from the point of view of people in rural communities. The last report on demographic trends affecting education, a monograph entitled "All One System" by Bud Hodgekinson, argues that from the point of view of a learner, education is all

one system. So why do we break it up the way we do and make it so difficult for people to be served? I will leave you with that thought. We need to look at our educational institutions in terms of the needs of the rural communities and the roles which we can play in meeting those needs.

Education and Rural Economic Development

GARDENIA WHITE

The Institute for Community Education and Training is a non-profit community based organization. We operate several programs and serve a segment of the community that has been left out and turned off by the established educational institutions. This segment of the community is rural black and poor women.

The Institute is located on Hilton Head Island, the coastal part of South Carolina. South Carolina can be divided into three distinct economic and geographic areas. Piedmont, Midlands and Coastal.

Coastal Region

Coastal South Carolina is a lush and humid region, the site of a tourist industry. During the last 30 years, the rural coastline has become a vacation playground with resort areas such as Myrtle Beach and Hilton Head Island attracting millions of tourists every year. Resort development, skyrocketing land prices and the flux of new residents have disrupted the indigenous population and their former means of survival through agriculture and fishing. The tourist economy offers seasonal, low-wage work, and a job market skewed to the service sector.

For example, in Beaufort County where Hilton Head Island is located, 38% of all employed black women work in services as maids, cooks, health aides, etc. Only 17.5% of employed black women are year-round, full time workers.

Unlike recent trends in the textile and apparel industries, tourism has created a boom economy along certain segments of the South Carolina coast. However, all people do not share equally in the benefits of this growth. Beaufort County black women live on $579.00 less than their median for the state. Even though in the Low Country of South Carolina women in general and black women in particular have the least socio-economic resources, black women constitute the largest segment of the entire population of this region. The unemployment rate for black women was the highest of any group at 14.9%. Moreover, many low-income persons in Beaufort County are in need of education and training to equip them to compete for the jobs created by tourism.

The tourist industry in coastal South Carolina should remain strong and continue to offer low-wage, seasonal employment to rural women. This type of employment in the Coastal region keeps its counties' unemployment rate around 10%, although in Beaufort County, for example, the low 1984 unemployment rate of 4.3% reflects the very low percentage of white men who are out of work. The figures are greatly misleading by the employment circumstances on Hilton Head Island. The negative cultural and economic implications of tourism for low-income women should not be ignored. Women's economic difficulties in the Coastal region are largely that of underemployment, due to the seasonal nature of the work and the lack of advancement opportunities open to them because of their lack of education. They will require academic and employment skills and developmental education to take advantage of both the employment possibilities and the higher education opportunities available to them.

Director, Institute for Community Education and Training

As stated earlier, this state of affairs began to change 30 years ago with the development of the Low Country into wealthy retirement and resort areas. During the last six years this development has accelerated rapidly and the land values have skyrocketed along with property taxes. As a result, the black community is being displaced. It has been predicted that by the year 2000 there will be no black landowners in the area. The problem is compounded by the fact that most of the higher-paying jobs created by the increased development go to educated young people from outside the locality, both black and white. The long-term residents lack the necessary education and skills to acquire these jobs.

FURTHER DESCRIPTION OF CONSTITUENCY: AEUW PROJECT

Economics

Based on the most recent (1980) S.C. Census, women constitute 44.9% of the total labor force in S.C., with black women accounting for 13.1% of the total. Of the total population of the five counties of Beaufort, Jasper, Hampton, Colleton and Allendale (140,804), 42.9% (60,464) is black. This percentage is largely skewed by the 3:1 white-black ratio on Hilton Head Island of Beaufort County due to the tourist/resort real estate development there. In the four other counties, blacks outnumber whites by about 2:1. Over half of the black population in the Low Country are black women. In 1981, per capita income in South Carolina was 49th among the 50 states. Within Coastal S.C., women in general and black women in particular are at the bottom of the socio-economic scale.

The 1980 Census shows that out of the 46 counties in S.C., the personal annual income average in Allendale ranks 44th. Jasper county ranks 39th; Colleton 35th; and Hampton 31st. Beaufort county ranks first in the state at $10,073, again due to the tourist industry there. The black poverty rate in the five counties ranges from 2 to 8 1/2 times that of the white poverty rate.

Of the total number of women in the five counties aged 18 to 65 years, an average of 44% are employed. The percentage of black women employed in private household occupations is 99.1% of Allendale county residents; 89.5% of Jasper county residents; 87.1% of Hampton county residents; 85.3% of Colleton county residents; and 84.6% of Beaufort county residents. Black women account for 55.7% of all service workers from Allendale county; 48.0% of all service workers from Colleton county and 43.4% of all service workers from Hampton county. Of secretaries, stenographers and typist, black women constitute only 11.8% in Allendale county (as compared with 88.2% for white women); 17.2% in Hampton county (79.3% for white women); and 20.2% in Colleton county (as compared with 78.8% for white women).

Education

The number of black women who in 1980 had completed grade 12 by at least age 16 was merely 363 in Allendale county; 533 in Jasper county; 560 in Hampton county; 987 in Colleton; and 1,508 in Beaufort county. Moreover, statistics gathered from Beaufort and Jasper county schools, which served a total of 6,305 students during the 1981-1982 school year, show that one-half (1/2) of the students completing high school are still functionally illiterate, with reading skills only on the fourth or fifth grade level. Scores of Beaufort County students on the Scholastic Aptitude Test (S.A.T.) are reported to be far below the average for both the state and the nation. According to an October 17th, 1982 article in **The Beaufort Gazette** newspaper, the verbal scores of southern regional level, and 60 points below the national level. On the math portion of the test, Beaufort students scored 25 points below the state average, 37 points below the regional average, and 52 points below the national average. For minority students, the average scores are even lower. Twenty-eight and 4/10th percent (28.4%) of the students reported indecision about their future educational plans.

The **South Carolina Statistical Abstract** of 1984 reports that in 1982-1983 the total Adult Education enrollment for Allendale county was 150; in Jasper county it was 218; in Colleton county it was 351; in Hampton county, 499; and in Beaufort county, 620. These figures compare strikingly with adult education enrollment during the same year in, for example, Oconee and Pickens counties of the Piedmont region, with 1,096 and 1,173 respectively. Sumter county in the Midlands region showed an Adult Education enrollment of almost 2,000 in 1983-84. Lack of

educational programs in the localities, in addition to the barriers to higher education inherent in the economic life styles of residents are reflected in the low enrollment figures of the five Coastal counties.

The Institute's Program "Access to Education for Underemployed Women" are to not only offer education otherwise unavailable, but to also:

1. To address the barriers to education which women confront under specific economic and geographic circumstances.
2. To call attention to the need for educational programs which address these barriers.
3. To explore issues surrounding the structural barriers to education for Low Country women.
4. To offer an educational program tailored to the specific circumstances of underemployed women in the Coastal region of S. C. In so doing, we intend to make clear why the barriers to education are so persistent. By addressing root causes and designing our program accordingly, we intend to break the cycle of women's undereducation and their consequent underemployment.

The Institute is an alternative education institution that aims to educate people for work in community development and community self reliances. We define our education process of disenfranchised people as one to create and preserve the systems, institutions and relationships that function to fulfill needs as they are defined by the people.

Because minority and poor communities have been denied equal access and resources, these communities lack a viable economic system to provide income-generating activities for its members. In order to have an educated economic self reliance community they have to be taught economic self reliance.

Who teaches, what is taught, and how teaching occurs does not just happen. Excellence in teaching requires systematic preparation and thorough understanding of what it is to teach and what it is to learn. We understand and accept education to be a learning process where teacher and learners constitute a learning community where both learn and grow. We accept that learning is ongoing and continuous. Our involvement with our people is part of their total life experience.

Barriers to the Education of Women in the Low Country

The "Access to Education for Underemployed Women" project is planned to enable the women to use their free time during their days to take classes and to prepare for further education. They are otherwise prevented from improving their educational levels due to a variety of barriers:

1. Educational programs are not available where they live.
2. They are young mothers with on the average of two children aged 2-4. Child care services are not affordable to them, or are simply unavailable. Because they must be absent from the home between 5:00 in the morning and 7:00 in the evening, they rely on relatives or friends to care for their children.
3. They are not informed about educational opportunities available outside the areas in which they live.
4. They have tried an educational program at Beaufort Technical College on Hilton Head, but felt inadequately prepared and dropped out before completion.
5. They do not have the financial resources to pay for an educational program.
6. They are unaware of loan or grant possibilities.
7. They do not have the transportation or the free time to take advantage of an educational opportunity.
8. They have families to care for and are unable to spare evening hours past 7:00 p.m. for classes.
9. Their work schedules do not conform to the daytime schedules of educational institutions. Because they arrive at their doorsteps at approximately 7:00 each evening, they miss the start of any evening classes which normally begin at 6:00 p.m.
10. Many are functionally illiterate and are not aware of educational opportunities. Their reading difficulties, often hidden from others, serve to keep them informed about alternatives.

11. Many have not completed high school and lack the free time or transportation after work to earn their GED.
12. They are displaced homemakers and older women who have lost their resources of income and are not qualified for jobs other than in domestics.
13. Due to their extremely inadequate educational experiences, they are discouraged and lack the confidence to pursue more education.
14. They receive considerable societal pressure to "stay in their place."
15. A support system, (women's support groups, counseling sessions, confidence-building workshops, etc.), which is greatly needed to facilitate the success of low-income women in educational and employment endeavors, is not available to them.
16. The burdens of their lifestyles--for example, race and sex discrimination, inadequate education and skills training, long work days, child and family care responsibilities--make educational advancement seem unattainable. As a result, they are locked into dead-end, low-paying service jobs with little expectation or hope for change.

This is what we are offering the women: literacy, developmental education and employment skills, high school equivalency training, secretarial skills/word processing computer skills, support groups and counseling, financial aid application assistance and small business training.

The bottom line for us is to assist many of the women in our program in starting their own business. Working on Hilton Head as a service worker is not the solution--but becoming one's own employer and employing one or two other women can help alleviate some of the problems.

VALUES AND ATTITUDES

Values and the Emerging Economy of the Rural South

ARTHUR G. COSBY

A central theme of this meeting has been the dramatic changes now occurring in the economy of the South, the dynamics of which portend difficulties for rural areas. The much ballyhooed sunbelt-growth now appears to be slowing and the economic prospects do not appear encouraging for most southern rural areas. Currently high unemployment rates are, on occasion, increasing. Much of the manufacturing base (for example, textile and garment industries) is diminishing--reflecting a strong trend of exporting low-wage manufacturing jobs overseas. There also seems to be a lack of any clear tendency for a significant growth in either high-tech or service alternatives.

The question that I have been asked to address is the importance of values for the South's emerging rural economy. It can be maintained that values are of the utmost importance, for they constitute a major aspect of the cultural context within which economic change occurs.

It seems advisable to briefly discuss how social scientists tend to use values. The most common approach is to take an essentially culture-free position; that is to say, one society's, community's, or individual's values are fundamentally neither better nor worse than values held by others. This approach has been extremely valuable in the development of sociology and anthropology. It basically allows the social scientist to study, in similar fashion, the value configurations of metropolitan America and the "Exotic Societies of the South Sea Islands" with similar objectivity. While this approach may be highly useful for scientific studies, it may have problems for development activities which normally involve the attainment of a goal or objective. It seems important to move away from the objective stance often maintained in scientific disciplines and to hold, or compare, values against the standard of how well they meet or facilitate development. Rather than ask whether a particular value configuration is fundamentally good or bad (right or wrong), it might prove more effective to ask what value configurations are most influential in either attracting industry or developing an indigenous industry within a rural community. It is from this perspective that the remaining part of this discussion will proceed.

Professor and Head, Department of Sociology and Anthropology, Mississippi Agricultural and Forestry Experiment Station, and Director, Social Science Research Center, Mississippi State University

It can be maintained that there are three general areas of value problems that impact substantially on the economic development of the rural South: 1) There is a set of values and attitudes that can generally be seen as dealing with progressiveness--more specifically, economic progressiveness. 2) There is a category of values and attitudes associated with the development and enhancement of human capital. 3) There is a critical issue of equity with special emphasis on race and sex discrimination. The rural South, when viewed from the outside, all too often is seen as having problems in each of these three areas. Entrepreneurs, for example, in New York, Dallas, and San Francisco, tend to view the rural South as having problems with progressiveness, human capital, and equity issues. Consequently, important business decisions are reached within the context of this image.

It can be maintained, or at least argued, that the rural population is often treated like a minority group. Modern-day America is primarily dominated by an urban society and one consequence of this urban dominance is that at least some rural folk resemble a minority group. A substantial number of rural Southerners suffer from problems of opportunity, achievement, attainment, and even stereotyping.

Perhaps the strongest argument for a rural minority lies in a linguistic contrast of slang terms used for rural and urban folk. In contrast to the hinterlands of Europe, the notion of "peasant" or "peasantry" has never developed as a meaningful concept for rural America. The term "peasant" is generally considered to be derogatory, possibly a result of ideas developed in association with a democratic and egalitarian society. One interpretation of linguistic surveys is that rural America has no "peasants," but has, instead, "plain folk." Cultural Geographer E. Estyn Evans believes that some peasant values do exist, but the avoidance of the term "peasant" has resulted in many labels which describe rural life and rural people. The cultural characteristics which are contained in the contrast may be seen as a dichotomy between urban (superior) and rural (inferior).

An examination of terms used to describe rural folk indicates not only that they are seen as an inferior or insignificant part of society, but also that often they are not taken seriously. Just as other minorities are stereotyped by the larger society, knowledge about rural folk is remarkably stereotypical in nature. Popular labels generally carry a negative connotation and represent an urban "put down" of rural people and rural life. This is readily evident in the slang terms used to refer to rural folk: "hicks," "rednecks," "plowboys," "hillbillies," "crackers," "clodhoppers," and, of course, "good ol' boys." This stereotypical knowledge extends into almost every supposed aspect of life in the hinterlands. When "hicks" are not spending their time driving tractors or picking hayseeds out of their hair, they are driving pick-up trucks, chewing tobacco, voting for George Wallace, sending donations to Billy Graham or Garner Ted Armstrong, coon hunting, square dancing, quilting, corn-husking, swatting flies, whittling, fighting Communism, or going to Sunday meeting. For those who feel that the notion of rural/urban differences is simply an artifact of the misguided imagination of a few sociologists, we challenge you to construct a comparable list of stereotypical terms for urban folk. While the above exercise may be a little amusing and perhaps suggestive of a parlor game, it does highlight the derogatory and stereotypical conceptions that many hold about rural areas.

Images are important, for they establish a context within which economic planning and decisions occur. In certain respects, value issues must be considered from both the perspective of mass society and southern rural society. Let us discuss for a moment the value-laden issue of race relations. While there is no doubt that the last few decades have resulted in dramatic progress in race relations for the southern United States, it should be stated that racism is still with us, and that the prospects are for racism in some form to continue into the foreseeable future. It is my suspicion that it will exist in "milder" forms throughout our lifetime. On occasion, the milder and more subtle types of racism have the most devastating effect upon the economic development of the rural South. Compare two stereotypes: the racist Southern "redneck" and the Yankee urban businessman. The stereotype of the racist Southern "redneck" suggests an individual whose personality includes a strong racist content (rough, crude, overt, and, to most of us, despicable). While we may think of this attitude as oppressive, the economic implications may

not be far-reaching. Most southern "rednecks" have no venture capital; they make few investment decisions. From the point of view of southern rural blacks, the "rednecks," even if they wanted to, would generally be unable to establish viable, economic development activities. Thus while this group may employ some violence, it is economically weak. At the same time, there may be some individuals, for sake of discussion, let us say, located in New York City, who because of some very subtle racist orientations can make decisions which have a potentially far-reaching impact on rural Southerners.

To develop this point, let me briefly discuss an information service that I have begun using as a research tool. This service is called Donnely Demographics, a subsidiary of Dun and Bradstreet. It provides excellent profiles, estimates, and projections of any geographic location within the United States. I feel confident that it is used as part of the decision-making process by corporate planners throughout the country. The service provides an excellent profile, based on the 1980 census, and then estimates what the current characteristics are for the present year. It also has a simulation routine that prepares five-year future projections for key characteristics. Let us suppose that a company is engaged in economic activity and it has designated from twenty to thirty candidate locations for some economic enterprise. This information service will allow them to quickly develop profiles for each of the candidate sites. It is at this point that I believe a subtle form of racism can occur that is detrimental to many southern counties. An examination of these various profiles quickly indicates the percentage of blacks, poverty level, educational level, and numerous similar factors. If there are preconceived notions that counties with a relatively large minority population represent poor prospects for economic development, then these counties tend to fall out early in the site selection process. I doubt that the corporate planners consider their evaluations to be racist. In their minds, they are merely making sound business decisions. The negative consequences, however, can be more important than the effects of the "redneck" on the economic viability of rural areas.

As you may recall, three value issues--progressiveness, human capital development, and equity--are significant for rural development. For a moment let us reflect on the issue of human capital. To a sociologist, human capital refers to those attributes and skills of an individual that make one an effective and productive citizen. Quite often discussion of human capital is restricted to needed improvements in education and training. Several years ago I was engaged in a series of studies involving the processes through which young people developed their human capital. In these studies we traced adolescents over several years, into their early adult years, in an attempt to ascertain factors which contributed to subsequent educational and occupational success. This line of research has led to such findings as, 1) parental encouragement leads to the development of attitudes conducive to achievement, 2) attitude development in adolescents is an excellent predictor of educational achievement, and 3) educational achievement then, in turn, is translated into higher levels of occupational attainment–a process of human capital development.

During the mid-seventies, we started posing the question differently. In addition to asking what factors led to success, we also sought those factors which tended to engender failure. That is to say, we started looking at the negative side of the human capital development process. We began investigating such influences as teenage pregnancy, illegitimacy, and early marriage. Our findings demonstrated that the timing of the first child, for example, can have a devastating effect upon the achievement of women. Interestingly, early child-bearing also had a smaller but still significant, negative impact on the achievement of males. Clearly then, these types of behavior influence the development of human capital, at the individual level, and, ultimately, at the community level.

It is at this point that values become important. Values concerning marriage, family, sexual behavior, contraception, and abortion clearly have implications for human capital development and, thus, community economic development. Unfortunately, this linkage is not clearly seen by many. It suggests, for example, that a certain type of value development can lead to economic development through the improvement of human capital. This point is that strategies to enhance human capital involve many other factors than education.

Marriage and family-type factors, especially such issues as birth control, sex education, and abortion, tend to have strong value content in the rural South. There are strong family, religious, and community attitudes associated with the appropriateness of these social activities. In this context, we are talking about situations where influences on human capital development reside in families, churches, and communities rather than the government. Again, I ask, which values facilitate the development of human capital and which hinder it?

While values are important, they are difficult to address. As an example, let us discuss an issue highlighted in Bill Moyer's recent television special on the inner-city black family. From my point of view, Bill Moyer was investigating family circumstances that tend to encourage or discourage human capital development. Perhaps the most controversial part of that program involved a focus on the incredibly high rate of black illegitimacy. In fact, since that television program was aired, this has become a cause celebre in the United States. For the sake of accuracy, I feel obligated to point out that Moyer's program was misleading in one respect. It tended to view "the crisis in the black family as an inner-city problem." If illegitimacy rates can be used as an index of this crisis, then it also exists in the rural South. For example, in Mississippi, the illegitimacy rate among blacks was over fifty percent in 1984. Illegitimacy is not just a ghetto problem, it also is a rural problem, and although it predominantly involves blacks, this trend seems to be increasing in other population groups. However, it must be stated that the trend toward a high illegitimacy rate among black families in the rural South is of such major proportion that the effect is devastating on both the human capital development of individuals and the economic development of rural communities.

I believe it is very rational to address the illegitimacy question. I was told, however, to avoid this issue because it was too loaded with political and race relation problems. Black leaders have focused heavily on discrimination and the removal of barriers as the chief strategy for black advancement; no doors will be closed because of race. Black leaders, with the noted exception of the Reverend Jesse Jackson, have been reluctant to address such a sensitive issue as black illegitimacy. It is my suspicion that they fear a focus on this topic will be used basically as a racist weapon to confirm stereotypes. They expect few to possess the necessary sophistication to understand and deal with this problem in a constructive manner. Many whites, on the other hand, hesitate to address the issue for fear of being labeled racist by their black colleagues. Thus, the important human capital problem of illegitimacy tends to be ignored and, perhaps more dangerously, politicized. This problem has great long-run implications for economic development which perhaps can best be analyzed from the value perspective and, possibly, ameliorated through alterations in the value configurations of individuals, churches, and communities.

In closing, I wish to again emphasize the importance of values for economic development and to stress that value associations with progressiveness, human capital development, and equity issues are essential foci for development activities. Their significance to the long-run improvement of conditions in the South must not be overlooked.

Values and Attitudes

KENNY JOHNSON

At the risk of repeating much of what Governor Winter had to say, I want to quote one aspect of his remarks about growth and development and the total image of the Sunbelt, and I want to speak from the minority perspective as a way of getting at this whole question of values and attitudes. In terms of the South as a region, there are three characteristics that set it apart. The first is the sizeable number of blacks who live in the South. The second is the fact that blacks make up a high percentage of the rural population. These two factors alone differentiate the South from any other region in the country.

In the 1970's and certainly in the 1960's, over one hundred counties in the South that were either significantly or majority black. The number is slightly less than that now. Yet even in 1980, almost half of these counties--despite being 50 percent or more black, had little or no black representation in the local government. That is the third fact that makes the South a region apart.

Despite the growth in the South in the number of jobs and new plant openings, the thing that is most striking--as Governor Winter pointed out and Stuart Rosenfeld has found in his research--is that this growth and development has been uneven. From my point of view, it is uneven in at least four different ways. First, the growth that has taken place in rural areas has not benefited areas with a majority black population. Data collected from the Southern Regional Council shows that those counties with a population that is 30 percent black or more are least likely to benefit from any type of new job growth.

Second, where job growth has taken place in areas with a sizeable black population, blacks have been least likely to benefit. Even when new jobs open and new plants come to areas that have significant black population, blacks do not benefit from that job growth. The fact is that there remains lingering discrimination--not only in hiring but in education and job training--that continues to limit the participation of black workers in new jobs in the region.

Third, neither black nor white workers have benefited in the many local communities where new jobs are filled by imported workers on the grounds that these workers are already trained. In these cases the jobs are lost by whites as well as black local workers. The training and human development opportunities are lost to the surrounding community. In some areas it is years before the local workforce benefits from these new jobs.

Fourth, the kinds and types of new jobs pursued by Southern state and local governments during the past ten to twenty years are the occupations that are least likely to be susceptible to unionization. These are the low paying jobs in the manufacturing and service sectors where growth has already begun to contract.

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When we talk to state development officials about these patterns, we arrive at some interesting observations. Executives tend to favor sites for the largest plants that are located on the periphery of the South's major population centers, where transport and communications are superior and the work forces are larger. A concern often raised by executives seeking to build or relocate plants is the fear that large black workforces--historically educated in substandard schools with high dropout rates--would not be able to handle highly skill industrial jobs. Further, it seems that black workers have an undeserved reputation for organizing more quickly than whites and for higher rates of absenteeism. Plant managers experienced with integrated work forces, of course, dispute these kinds of findings. Finally, white business and community leaders did not actively seek new industry in most black counties until the mid 1970's.

There are a number of reasons why these racist values and attitudes have prevented local industrial development in significatly black areas. One key component emerges: economic development is a local responsibility. In many instances we have found, particularly in the predominantly black areas, that local government officials did not actively seek development, nor did they even want development. Frequently this had to do with new jobs paying higher wages and competing with agriculture for the unemployed workforce. The concerns of the predominantly black workforce were not reflected in local governments in which they were not represented. The fact is that in many of these black areas, local governments not only actively seek job growth and economic development, they have in fact discouraged it.

Those of us who have been working with predominantly black areas attempt to duplicate or replicate what has been done successfully. Four or five ingredients emerge that we think were key to certain areas being successful. One case that is mentioned frequently is the development in the 1970's of the Tougaloo, Mississippi, area. Tougaloo enjoyed one of the key ingredients I have already mentioned: the local government was serious about attracting new industry and provided the necessary cooperation and leadership.

Second, the Tougaloo area already had in place, or at least was in the process of putting into place, a sound infrastructure development program--water, sewer, fully-equipped industrial park, adequate training facilities, etc. Third, heading the industrial development effort was a trained and experienced industrial recruiter. This is not a place for on-the-job training. Rural areas that succeeded in economic development had people who were in fact experienced. Fourth, Tougaloo had access to a source of revenue to pay for what is undoubtedly a very expensive effort.

When we look at most predominantly black rural areas, three out of these four things are usually absent. The only thing that we have begun to put into place is the movement toward electing local governments that want the benefits of economic development for blacks as well as white citizens.

One of the curious ironies for these areas has been that in the 1950's and 1960's we had local governments that were not interested in development. Now, we are beginning to move to a new kind of leadership in these areas, a new kind of local government. As black political participation approaches equity and whites are increasingly willing to vote for black candidates, black elected officials replace whites throughout the Black Belt in the South. So now we find the opponents of equitable economic development saying that these areas are unstable, and that the workforce is not trained or not technical enough.

My point is that we must begin to change the perceptions and the attitudes of those folks who are making decisions about where new plants will open, where infrastructure systems will be built, and about where growth is going to occur. Then we will see local governments capable of encouraging a steady development process that will not bypass rural areas with significant black populations.

A lot of our discussion over the past day or so have been about education as the key component to this growth and development. I agree that we must begin to make adjustments in education. The tragedy is that while new kinds of investments have been made in education, one of the problems that we are still experiencing in the rural areas is the dropout rate.

Over the past weeks I have been spending some time in rural schools looking at why our children are dropping out. One of the keys seems to be that these youngsters are seeing their brothers, sisters, cousins, and friends finish high school--and in some instances complete college--yet their job opportunity picture is the same as those who didn't finish school. In the 1960's when blacks were graduating from school, there was at least a sizeable job opportunity, and we could see the difference between the economic life of those that had graduated and those who did not. There was a real difference.

That achievement differential has almost disappeared. There is very little difference today, and our children know it. The main employer for blacks in rural areas is the school system. All of us can't be school teachers. In fact, we have a surplus of black teachers in many of the rural areas where the private sector development has been light to nil. So while we are talking about increasing investments in education, I think we have to take a serious look at incentives--and the real dollar incentive--for these young people staying in school and succeeding in school.

Effect of Southern Values and Attitudes on the Role of Women in the Economy of the South

BARBARA SMITH

By the year 2000, if present trends continue, women will comprise one-half of the labor force in the rural South.[1] Farm women, housewives, professional women, black women, white women--all are seeking wage employment. The rapidly rising labor force participation of women has been called "the most important labor market development of this century."[2] It is associated with other economic trends, including the changing occupational structure and growing service economy, and it carries fundamental implications for development policy.

It would be mistaken to assume that women's participation in the labor force is entirely a recent phenomenon. Rural women have always worked in the South--picking cotton, stripping tobacco, working in textile mills, in canneries, in offices, kitchens and on farms. In a region where the average wages even of white men have been modest and relatively low, women's employment long has been critical to many families' economic survival. This is especially true today, when over 55% of all Southern women with children are in the labor force, and many of these women are the primary breadwinners for their families. In the rural South, 20% of all households are now headed by women--a proportion that continues to rise.[3]

In the agricultural sector, women work as unpaid laborers on family farms, as wage workers in the migrant labor force, and in some cases as farm operators themselves. Over half of the 128,000 women who operate farms in the United States do so in the rural South.[4] Perhaps most importantly, especially during the current crisis in the agricultural economy, women generate essential income through their off-farm labor. Most studies indicate that 33-40% of adult women who live on farms work for wages; through off-farm employment, they supply a steady cash income and, in some cases, health insurance and pension benefits, that are critical to their families' economic survival.[5]

Women are also essential to the industrial sector of the rural South. Historically, white women and, originally, children were the backbone of the labor force in the South's most important industries, textiles and apparel. Far more than their urban counterparts, rural women remain dependent on the manufacturing sector for their employment,. Today, almost two-thirds of the workers in Southern textiles and apparel are women, and the majority of these women are rural.[6]

In part because of this central role in the South's traditional industries, rural women face special problems during the current period of economic transformation. Just since 1980, there have been 60,000 jobs lost in the textile industry of North Carolina and South Carolina, the region's leading textile manufacturing states.[7] This decline is only partially attributable to rising imports of textile and apparel products. Especially in the textile industry, the job loss is due to an extensive automation of the work process that has been going on since the 1970's. The automation trend suggests that, even if imports are curtailed through protectionist measures, the decline in textile mill employment will continue.

Director of Research and Education, Southeast Women's Employment Coalition

In human terms, the layoffs and reduced work force in textiles and apparel mean above all a loss of economic opportunity for rural women; for rural black women, who have fewer employment alternatives than white women, the loss is especially devastating. Diminished job opportunities for rural women in the textile industry are partly responsible for the elevated female unemployment rates in many Southern states. In 1984 in North Carolina, for example, the aggregate unemployment rate was well below the national average of 6.7%; the unemployment rate for women, however, was above the national average at 8.3%, and for black women, it was 17.8%.[8]

This situation is aggravated by the fact that many of the South's emerging manufacturing industries do not employ large numbers of women-rural nor urban. Transportation equipment, non-electrical machinery, chemicals and allied products--in all of these industries the Southern work force is approximately 80% male. More rural women are employed in textiles and apparel alone than in all the emerging manufacturing industries combined.[9]

Rural women have of course found employment in other, non-manufacturing sectors of the economy. Even in more remote areas of the rural South, especially long the coast and in the mountains, tourism is generating a special form of economic growth and service sector expansion. This industry tends to be particularly divisive and controversial in rural areas, for cultural as well as economic reasons. A rapid increase in property values, taxes and the cost of living--all of which tend to displace local landowners and disorganize local communities--frequently accompanies tourism. For those who own businesses or have access to capital, tourism can bring an economic bonanza, but for the bulk of people, the offerings are more mixed. By its very nature--i.e., servicing and entertaining vacationers--tourism generates an occupational structure weighted toward menial, low-wage jobs; it also gives rise to a social structure divided between indigenous people and vacationers, those who work and those who play. How to retain local ownership of land and local benefit from tourist growth, how to finance the water and sewer systems necessary for a periodic influx of vacationers, how to protect cultural integrity and survive economically in the environment of tourism--these are all questions facing rural women and men in the scenic areas where tourism is increasing.

In the rural South, as in other areas of the nation, the service sector is a key source of new jobs and a major employer of women. In the service industries of the rural South, women make up over 60% of the labor force. For those with professional training in the traditionally female fields of nursing and teaching, the expansion of educational and health services (which account for a large portion of this sector) has brought increased job opportunities. Unskilled women, however, tend to end up in the bottom ranks of the service sector, where wages are low, benefits are few and the opportunities for advancement are scarce. Cooks, maids, cashiers, secretaries, waitresses, nurses aides--these are the occupations of most women in the rural South today. Women displaced from textile mills are hard pressed to find a service job that matches their former wages. The average wage for workers in restaurants and bars, for example, is about $2.00/hour below that in the textile industry.[10]

Taken as a whole, these trends do not bode well for rural women in the South. Unemployment, underemployment and low wages all remain serious problems for rural women, especially for black women. Rural women are losing their traditional source of employment in textiles and apparel but are not being hired in comparable or higher wage jobs in the South's emerging manufacturing industries. Women are the bulk of workers in the burgeoning service sector, but those without professional or technical training rarely make a living wage in these jobs. Throughout most Southern states, women's unemployment rates tend to be significantly higher than men's and their wages significantly lower. As of the 1980 census, rural women who worked full-time, all year-round were earning 59¢ for every dollar earned by men in the South. All of this is taking place at a time when women are increasingly the sole providers for children and other family members. In other words, women's economic opportunities are declining at precisely the time when their financial responsibilities for themselves and their families are increasing. The result is a much publicized trend: the feminization of poverty.

What are the implications of these trends for economic development policy? First, the special circumstances and needs of rural women must be recognized and incorporated into development policymaking. Those needs include quality child care, higher wage industrial jobs, job training, access to capital, and individual technical assistance in making use of their existing resources--be they land, craft skills, industrial work experience, etc. If women are to benefit fully from the growth of the service economy in which they figure so importantly, they must have access to the services they provide for others, and they must own and control a greater portion of service enterprises. For example, state policies that promote local women's ownership and operation of child care centers in rural areas would be of enormous benefit to women-as mothers, and as employees and owners of such centers. Child care subsidies for low-income working mothers would enhance the market for this service, and would assist rural women who for lack of child care are fired, forced to quit their jobs, or are unable to look for employment in the first place.

If women are not to be ghettoized in the service sector, however, they must also receive vocational training for industrial and technical jobs, and they must have equal access to those jobs once trained. In a recent SWEC survey of 630 rural women in North Carolina, South Carolina and West Virginia, over half of the respondents indicated a desire to return to school for more education and training. The major obstacles that prevented these women from enrolling in educational programs were lack of money, distance to school, lack of transportation, and lack of child care.[11] Many rural women are eager to upgrade their skills, but they need supportive services to enable their participation in training programs. Vocational education programs that actively recruit women into training for higher wage technical and industrial jobs are also needed, so that women do not remain traced into low-wage occupations.

The greatest, most direct power that state and local governments presently hold over women's economic opportunity does not lie in their development policy or educational programs, however, but in their role as employers of women. Nineteen percent of employed women in the rural South work directly for state and local governments, but they are concentrated almost entirely in the traditionally low-wage, female occupations of clerical work and school teaching. Women are effectively barred from employment in higher wage jobs, e.g., in road construction or on water and sewer projects, and they are underrepresented in higher administrative positions. An ongoing investigation of all state Departments of Transportations by the Federal Highway Administration has documented that women hold less than 4% of all higher paying craft and administrative jobs in these departments. In the state of Georiga, 9.8% of the employees in the Department of Transportation are women, more than half of whom are clericals; there are no women in skilled craft or "official administrative" positions.[12] More than industrial recruitment strategies or business development programs, state and local governments could have an enormous impact on the economic status of rural women and their families, and thereby the economic development of rural areas, through revision of personnel policies toward their own workers. Affirmative action in hiring, promotional and training opportunities for women and minorities, evaluation of the comparability of civil service jobs and revision of pay scales according to the principle of comparable worth–all of these steps are within the control of state and local governments.

The overall point is that economic development policy must explicitly recognize and deal with the enduring reality of race and sex discrimination if it is to have a positive effect on the lives of rural women. This issue is first and foremost ethical, a matter of principle and fairness, but it is also a practical matter of economics. Women are a central part of the Southern economy. Their labor power is crucial to employers, their earning power is crucial to families, and their buying power is crucial to communities. If per capita income in the South is to rise, and if the skill level of the Southern work force is to increase, then women must become a recognized, targeted constituency for economic development programs. Development policies that ignore the special needs and circumstances of 40% of the labor force and 50% of the population simply will not succeed. For example, recruitment of industries that do not even hire women in their work forces will not alleviate the problems of most displaced textile workers. Vocational education programs that train women only as beauticians, secretaries and for other low-wage occupations will not increase the income of women or the standard of living in the South as a whole. If development policy is to benefit rural women, their families and communities, then it cannot simply promote economic growth; it must promote economic equity as well.

NOTES

[1]This statement is based on the current rate of growth in women's labor force participation in the rural South. See the U.S. Bureau of the Census, **1970 Census of Population; 1980 Census of Population.** The term "rural" indicates areas where the population is below 2,500; this is the definition used by the U.S. Bureau of the Census.

[2]Ray Marshall, "Work and Women in the 1980s: A Perspective on Basic Trends Affecting Women's Jobs and Job Opportunities," Women's Research and Education Institute, Washington, D.C., 1983.

[3]See Bureau of the Census, **1980 Census of Population**, Volume 1, Chapter C.

[4]Judith Z. Kalbacher, "Farm Women as Farm Operators," **Rural Development Perspectives**, Volume 1, Issue 2, February, 1985, page 24.

[5]Priscilla Salant, "Farmwomen's Work Off the Farm," **Rural Development Perspectives**, Volume 1, Issue 2, February, 1985, pages 25-26.

[6]U.S. Bureau of the Census, **1980 Census of Population.**

[7]See David Avery and Gene D. Sullivan, "Changing Patterns: Reshaping the Southeastern Textile-Apparel Complex," **Economic Review**, November, 1985, page 36.

[8]U.S. Department of Labor, Bureau of Labor Statistics, **Geographic Profile of Employment and Unemployment, 1984**, Bulletin 2234, May, 1985.

[9]"Traditional" Southern industries include textiles, apparel, food, tobacco, furniture and primary metals, among others. "Emerging" or "non-traditional" industries include machinery, instruments, transportation equipment, printing and publishing, chemicals and petroleum, among others. See the classification system in Stuart A. Rosenfeld, Edward M. Bergman and Sarah Rubin, **After the Factories Changing Employment Patterns in the Rural South** (Research Triangle Park, NC: Southern Growth Policies Board, 1985), page 59-60. This text utilizes their industry classification, and applies it to employment data from the U.S. Bureau of the Census, **1980 Census of Population.**

[10]U.S. Department of Labor, Bureau of Labor Statistics, **Employment, Hours, and Earnings, United States, 1909-84**, Volume 1, Bulletin 1312-12, March, 1985.

[11]Southeast Women's Employment Coalition, **Women of the Rural South Economic Status and Prospects** (Lexington, KY: SWEC, 1986).

[12]These data are the preliminary results of an investigation undertaken by the U.S. Department of Transportation pursuant to an administrative complaint filed by the Southeast Women's Employment Coalition. For further information, contact SWEC, 382 Longview Drive, Lexington, KY 40503.

AGRICULTURE AND THE COMMUNITY RESOURCE BASE

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Community Forces and Agricultural Change: Some Policy Issues

DAVID MULKEY AND LIONEL J. BEAULIEU

INTRODUCTION

In recent years, forces external to agriculture have become increasingly important to the future direction and viability of the farming sector (Breimyer, 1977; Deaton, 1985; Paarlberg, 1980). Also, based on discussions of property rights, natural resources, economic development and farm/non-farm interactions, it is increasingly clear that an important subset of these forces arise within the local community setting (Braden, 1982; Castle, 1978; Libby, 1985; Deaton, 1985; Shaffer, Salant and Saupe, 1985). Further, appears addressing various aspects of the community and its relationship to agriculture generally support the conclusion that some of the agriculture changes are in response to community changes. Aspects of the community/farm mosaic considered by various authors include population shifts, off-farm employment changes, urban competition with agriculture for land and water resources, other farm-urban conflicts, environmental concerns associated with agricultural operations, and taxing, spending and regulatory activities of local and state governments (Breimyer, 1977; Buttel, 1983; Coughenour and Swanson, 1983; Deaton, 1985; Magleby and Gadsby, 1979; Lapping, 1975; Singh, 1983; and Beaulieu and Molnar, 1985).

In short, the literature identifies a broad array of community forces with the potential for affecting agriculture. An examination of these local influences and their implications for state and local government policies provides the focus for this paper. Community forces and their impact on agriculture are first discussed in a general sense, and then the conceptual model presented is used to identify some specific policy issues.[1]

COMMUNITY/FARM INTERACTIONS

To allow systematic consideration of policy considerations arising from the variety of farm/non-farm interactions, addressed in the literature, an integrated model that incorporates many community changes and the possible consequences for the agricultural sector is presented in Figure 1. Agricultural changes are viewed as the end result of a set of agricultural/community interactions and a set of interactions within the local community. Agriculture in this context is

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[1]This paper draws heavily on a previous paper by the authors. The conceptual framework is taken directly from that paper (Beaulieu and Mulkey, 1985).

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assumed to consist of farms (or farm families) which are atomistic, maximizing units producing products for sale in markets over which they have little, if any, control. Different types of farms will react differently in similar situations (Patterson and Marshall, 1984), and a broad array of outcomes are possible. However, in any case, the cost structure of the farm relative to that of farms which produce the same products is the critical factor determining the nature and long-run viability of the farming enterprise. By the same token, changes in individual farm costs in the aggregate determine the cooperative advantage and viability of a region's agriculture.

For the commercial farmer trying to maximize profits, the relative cost structure reflects directly in net farm income. At the other extreme, for the unprofitable farmer attempting to maintain farming as a lifestyle, or for the beginning farmer unable to cover all costs, the relative cost structure determines the level of off-farm subsidy necessary to maintain the farming unit. In either case, a community change which directly or indirectly influences farm income may result in structural changes in the farm operation --changes in the scale of the operation (increase, decrease, or move to part-time), changes in input combinations (i.e., increased land prices and wage rates may result in the use of more capital), or changes in the mix of products produced either in response to new local markets or changes in input prices.

The exact nature of agricultural change in a particular area depends on the type of community change, on the existing stock of community resources and on the type of agriculture in the local area. For example, service industry employment growth spurred by an immigration of retirees may have different effects than would population growth which results from increased manufacturing employment in a local area. On the other hand, population and employment growth from any source would have different effects in an area characterized by large commercial farms than would the same growth in an area with mostly small and part-time farms.

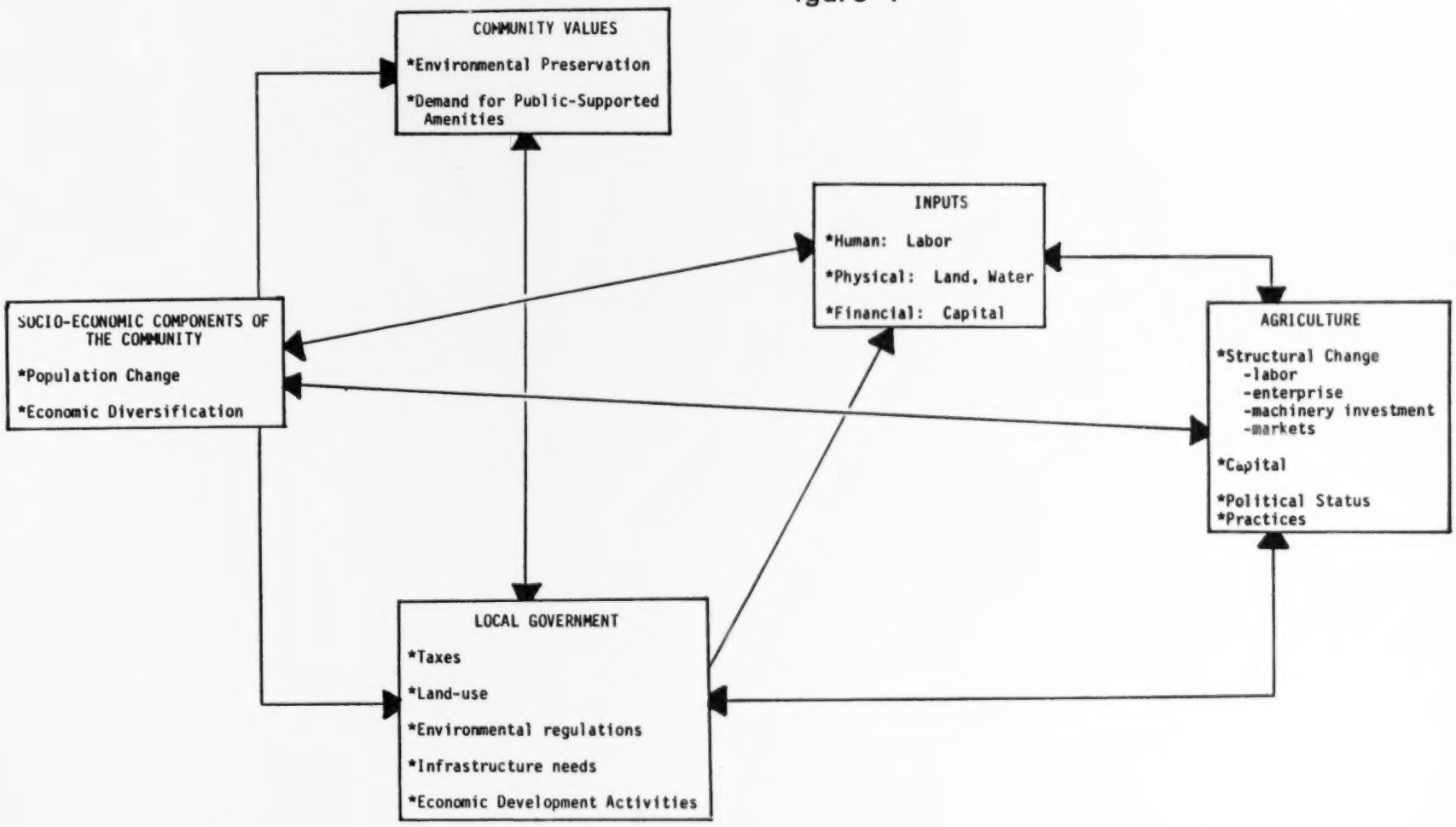
Figure 1 depicts community causal forces as arising from three interrelated components of the local arena--a socio-economic component consisting of population change and economic diversification, a local government component, and a community values component. Changes in either component may be transmitted directly or indirectly to agriculture through increased local markets, through conflicts with newcomers, through higher community wage rates (which change the cost of farm labor and the opportunity cost of family labor), through higher land prices (which may result in higher taxes, higher rents, and barriers to expansion), and through increased costs or decreased availability of other inputs. Interactions between the various components of Figure 1 then may be further reflected in input prices and production costs as a result of taxing, land use control, water management, and environmental regulatory activities of local government in its efforts to resolve conflicts on resources and to provide services to an expanded population.

In short, community change directly or indirectly influences agriculture, with indirect effects transmitted through changes in the price or availability of inputs. Further, most of the effects can be better understood by assessing their impact on the relative cost structure of farms. From this viewpoint, the following section briefly discusses some key community forces and their associated consequences for agriculture with specific policy issues considered in a subsequent section.

SOME AGRICULTURAL IMPACTS

Using Figure 1 as a guide, existing evidence allows several types of community impacts on agriculture to be identified. Rural population growth in four mid-western states has been shown to be related to increased numbers of small farms (Harper et al., 1980). This, perhaps, represents a desire by new rural residents to farm on a part-time basis (Ploch, 1978; Nuckton et al., 1982) or to seek intrinsic rewards associated with farming (Coughenour and Gabbard, 1977). Population growth is also associated with a more diversified mix of enterprises in rural areas with direct implications for agriculture. Economies of scale may allow necessary production inputs to be purchased at lower costs (Deaton, 1985), and farmers may benefit from expanded local markets for their products. In addition, to these direct effects, community change also impacts agriculture indirectly. Figure 1 indicates that community values, local government and inputs are important variables for transmitting indirect effects to agriculture.

Figure 1


COMMUNITY VALUES
*Environmental Preservation
*Demand for Public-Supported Amenities
INPUTS
*Human: Labor
*Physical: Land, Water
*Financial: Capital
SOCIO-ECONOMIC COMPONENTS OF THE COMMUNITY
*Population Change
*Economic Diversification
AGRICULTURE
*Structural Change
-labor
-enterprise
-machinery investment
-markets
*Capital
*Political Status
*Practices
LOCAL GOVERNMENT
*Taxes
*Land-use
*Environmental regulations
*Infrastructure needs
*Economic Development Activities

The attractiveness of rural areas as places to live and expanding job opportunities in rural areas are responsible for the growth of rural population (Fliegler and Sofranko, 1984; Ploch, 1978; Murdock, et al., 1980), and the result is a transformation of community value systems. Changing values result in altered demands for goods and services (Brown, 1984), increased service demands on local government and possible conflicts with older residents over the desirability of the services (Price and Clay, 1980), increased environmental awareness in the community (Ploch, 1978), and increased community concern over some farm practices which degrade the environment (Magleby and Gadsby, 1979). In total, farmers may benefit from changing community values as they enjoy improved services. However, they may, on the other hand, experience escalating production costs from higher taxes and increased regulatory constraints on farm operations.

Population growth and economic diversity in rural areas also impacts agriculture by altering prices and availability in the input component of Figure 1. In a negative sense, higher community wage rates mean higher production costs. However, associated increases in off-farm employment opportunities allow many to remain in farming (Carling and Ghelfi, 1979; Deseran, et al., 1984), provide capital to new or expanding farmers (Bergland, 1981; Carlin and Ghelfi, 1979), allow farmers to make better use of family labor on a year-round basis (Singh, 1983), and reduce the income risks associated with the adoption of new innovations (Deaton, 1985). Still, however, from strictly the farm perspective, increased labor costs likely mean changes in farm operations, either decreases in scale, changes in the mix of crops produced, or increased investment in machinery (Carlin and Ghelfi, 1979; Coughenour and Swanson, 1983; Deaton, 1985; Leistritz, Murdock and Saholm, 1982).

Non-farm development also impacts agriculture through increased competition for land and other natural resources. Population growth usually means higher land prices and increased opportunities to sell land for non-farm uses. In the fist case, higher land prices mean higher production costs for farmers and decreased ability to compete in commodity markets. In the second case, the loss of agricultural land is exacerbated by the fact that land suitable for agriculture is often the easiest land to develop for non-farm uses (Garkovich, 1982; Lapping, 1975; Prunty, 1979). High land prices also pose particular problems for small to medium sized farmers wishing to expand their operations (Buttel, 1983), for tenant farmers faced with escalating rents, and for those wishing to enter farming for the first time (Coffman, 1979).

Non-farm development further impacts agriculture via its influence on local government. Local governments depend on property taxes for revenue (Deaton, 1985), higher taxes may mean the loss of farms (Breimyer, 1977), and such loss may result in agricultural land being left idle for some time until development actually takes place (Conklin and Lesher, 1977). Spending activities of local governments influence farm families directly through the levels of services provided and indirectly as the provision of local services influences the price of land. Local government is also the focus for land use control activities (Blobaum, 1978; Libby, 1985; Raup, 1975) and for much of the increased activity in the area of water management and environmental protection. Increased government activity here has the potential to substantially increase agricultural production costs (Breimyer, 1977; Penn, 1979; Blobaum, 1978; Buttel, 1980; Magleby and Gadsby, 1979; Blackwell, 1974).

Finally, local government is also responsible for economic development programs. As such, these programs impact agriculture through the direct and indirect effects discussed above. However, where development programs are oriented directly to agriculture, they may result in expanded local markets for agricultural products.

SOME POLICY ISSUES

A variety of influences in a local community then have the potential for directly or indirectly affecting the viability of agriculture in a local area. Therefore, to the extent that community change is subject to modification through state and/or local government policies, the viability of agriculture becomes a policy issue at that level of government. In terms of the conceptualization in Figure 1, this policy role arises from local governments' key position in the direct and/or

indirect linkages between agriculture and various other components of a local community, and it is further reflected in local governments' ability to directly impact agriculture through its taxing and spending powers. With this in mind, this section briefly deals with several specific policy issues at the state/local level. Selected policy issues fall under the general headings of land use, water and environmental management, and economic development.

Land Use

Of all state/local policy issues with the potential for influencing agriculture, perhaps the most complex arise in the area of land use. As noted, land law and land use regulation is mostly state law/regulation, but typically, control actually takes place at the local level. Several key issues are noted here.

Farm-Urban Conflicts: In an urbanizing area with active agricultural operations, conflicts are likely to arise between farmers and their urban neighbors. New residents may take offense at certain farm practices with potential for degrading the physical environment. In addition, they may object to the normal noise, dust, and odors associated with farming operations. Farmers, at the same time, are likely to complain of problems caused by urban residents including vandalism, trespassing and problems associated with moving machinery and livestock on or across congested roadways.

This set of farm-urban conflicts may be resolved to either the benefit or detriment of agriculture. Obviously, the best approach may be advance planning in the land use area to avoid many of the problems. However, where such problems exist, some cases have resulted in farms or certain farm practices being declared a nuisance (Prunty, 1979). To prevent this outcome several states have adopted "right-to-farm" laws. A 1984 study reported these laws in 32 states (Farmland Notes, 1984). The general intent is to protect farmers from legal claims which arise over normal agricultural operations (National Agricultural Lands Study, 1981). In terms of the conceptual framework here (Figure 1), the intent is to avoid unnecessary increases in operating costs.

Agricultural Land Preservation: Another issue currently being debated in many states and in many local communities is the question of agricultural lands preservation. There is no doubt that economic and population growth in a community results in the conversion of agricultural lands to non-farm uses. The policy question is whether or not state/local governments should adopt programs explicitly designed to halt or slow this conversion of agricultural lands. Many state and local governments currently have such programs. Included are tax relief programs, agricultural zoning programs, agricultural districting programs, and programs which provide for the transfer and/or purchase of development rights (Farmland Notes, 1984; National Agricultural Lands Study, 1981). All programs have the common element of attempting to decrease the effects of non-farm competition for agricultural lands.

Agricultural land programs can potentially reduce price increases and slow the conversion of agricultural lands. However, the benefits from doing so (protection of aquifer recharge areas, maintaining greenspace and wildlife habitat, etc.) often extend beyond the agricultural community. Further, these benefits may generate general political support for the protection of agricultural lands. From an agricultural viewpoint, however, such programs offer a mixed bag. Several consideration are important.

The first such consideration relates to the price of land in growing areas. Since agricultural land preservation programs work to reduce urban growth pressures, the result may be reduced values for agricultural lands or at least, price increases below those for land available for non-farm development. In terms of Figure 1, this avoids some of the growth induced cost increases facing agriculture. However, land price changes affect farmers' equity positions. The result is lower net worth and perhaps a reduced ability to generate capital through borrowing. Also, land use restrictions reduce the flexibility of those wishing to move out of farming.

A related point concerns the issue of equity associated with various farmland preservation alternatives. As noted many of the benefits of agricultural land preservation programs accrue to the public at large, but under alternative programs the costs are paid by different groups. For example, if rigid zoning programs are used to preserve agricultural lands, costs likely accrue to farmer in terms of lower land prices. On the other hand, a purchase of development rights program could generate the same benefits and reimburse farmers for losses from general revenue sources. Given the sizable proportion of farm assets invested in land, the resolution of the equity question is of immense concern to farmers.

A final point is that agricultural land programs address only one aspect of farming, the land input. Preservation of this input does not ensure the continued existence of agriculture in a local area. Agriculture is a multi-faceted operation subject to a host of influences that are beyond local control. Again there is a need for planning and research in advance of program implementation. Agricultural land preservation may well be futile in areas where agriculture is being lost for reasons beyond local control. Finally, it is worth noting that local programs to keep land in agriculture may be inconsistent with the national emphasis on the reduction of agricultural output.

Land Taxation: Land taxation is another area where local government has the potential for directly influencing the level of farm production costs and thereby, the net income of farm families. Local government depends, to some extent, on property taxes for revenue (Deaton, 1985), and the amount of taxes paid by landowners is dependent on the value of the property in question.

Thus, higher land values associated with community growth may mean higher taxes and the possible loss of farms in the area (Breimyer, 1977). Evidence, however, suggests that many state governments have recognized this problem and have taken steps to prevent the premature loss of farmlands through higher taxation. As of 1980, 48 states provided for some type of tax relief for land used in agriculture. Generally, state laws provide for the taxation of agricultural land on the basis of value in use rather than higher market values (Clouser and Mulkey, n.d.).

The existing state of affairs though does not imply a permanent solution to the problem of tax induced cost increase. There is likely to be continuing demands on governments in developing areas to expand the quality and quantity of services offered. The result is likely to be continuous pressure on tax programs which lower total tax revenues or which increase taxes for some groups while lowering them for others. If such programs are justified for agricultural lands, then public education programs may be necessary to explain the benefits to urban taxpayers.

Finally, there is the problem of abuse of agricultural exemption programs by land speculators and other non-farm landholders. Many states have adopted use value assessment programs with various types of recapture clauses to prevent this type of abuse (Clouser and Mulkey, n.d.).

Public Facility Location: The question of agricultural lands protection and/or conversion is also intimately related to the provision of public services and the location of public facilities. The idea is that in addition to programs at the state/local level which are explicitly labeled as land use programs, government does many other things which indirectly influences land use. The location of roads and transportation facilities, the extension of water, sewer and electric utilities, and many other actions of government contributes to land use changes ad the loss of agricultural land. For the community sincerely interested in the maintenance of a viable agriculture, a systematic examination of all state/local government policies would seem to be in order. Complex and costly agricultural land protection programs, for example, may be useless if their effect is negated by other actions of local government.

Environmental and Water Management

Several authors have noted the potential implications for agricultural production costs of increasing environmental regulatory activities (Breimyer, 1977; Penn, 1979) and the general increase in regulatory activity at all levels of government (Blobaum, 1978; Buttle, 1980; Magleby and Gadsby, 1979; Blackwell, 1974; Penn, 1979). Environmental concerns are reflected locally

and environmental quality is noted to be at least partly responsible for the resurgence of population in rural areas (Dillman, 1979; Fliegel and Sofranko, 1984). Further, population increases are likely to continue and bring more pressures on resources in rural areas.

All resources are affected, but perhaps the more critical one is water. Population expansion means increased competition for water (Evans, 1978), a resource critical to agriculture (Penn, 1979). In some areas, competition for water and debates over allocation priorities are already intense (Pierce, 1979; Bergland, 1981). However, at the local government level in the South, concerns over water quality may be more pressing than are concerns over the amount of water available for agricultural use (Groth, 1975). Agriculture contributes to water quality problems in a variety of ways through run-off in agricultural areas including silt from soil erosion, fertilizer nutrients, chemical residues from pesticides, and wastes from food processing plants and feedlots (Bergland, 1981; Stults, 1979; Groth, 1975; Blackwell, 1974). Regulatory controls to deal with these problems have increased, and it seems obvious that this increase will continue (Blobaum, 1978).

In terms of Figure 1, regulation of the use of water polluting substances at the farm level translates into cost increases. In general, the effects have not yet been substantial (Magleby and Gadsby, 1979), but there is little doubt about the magnitude of potential effects. This potential is highlighted by one author who notes that environmental problems of agriculture are "not merely the results of inappropriate agricultural practices that can be changed within the context of the present structure of agriculture" (Buttel, 1980). He goes on to point out that what may be necessary is a major structural change for the agricultural sector. To the extent that this author is correct, the water quality question and associated regulatory activity may be one of the more serious policy issues facing agriculture at the state/local level.

Arguments here do not suggest that agriculture should not be subject to regulation where agricultural activities influence environmental quality. They do suggest, however, that such regulations have immensely important implications for agriculture, that regulators should be knowledgeable about agricultural operations and potential effects of regulations, and that areas interested in maintaining a healthy agriculture should strive to accomplish environmental goals while minimizing disruptive effects on agriculture.

Economic Development

Little needs to be said at this point about the implications of economic development programs for agriculture. They, along with other local government activities, are deeply intertwined with the process of community economic and population growth. As such, economic development programs contribute to the direct and indirect agricultural effects noted earlier. Perhaps the key issue is whether or not communities take steps to ensure that agricultural effects are explicitly considered as a part of the economic development planning process. Such an effort could go a long way towards minimizing the negative impacts of economic and population growth on the agricultural sector.

Explicitly considering agriculture as a part of the development planning process also provides the opportunity to maximize the beneficial impacts of development on agriculture. For example, programs designed to attract new value-added industries within the local agricultural sector could provide expanded markets for local farm products (Libby, 1985). Other programs oriented to helping farmers take advantage of local markets created by population expansion also provide useful examples. Again, the key issue is the inclusion of farmers and farm considerations as a part of the development process as opposed to dealing with the problems after development has occurred.

CONCLUDING COMMENTS

This paper has attempted to address the question of community forces and agricultural change within an integrated conceptual framework and to identify some specific policy issues of importance to agriculture at the state/local level including farm/urban conflicts, land use, environ-

mental regulation, local government finance, economic development, and changes in the price and/or availability of inputs. Specific changes were noted to be dependent on the type of community, the stock of resources, and the nature of the local agricultural sector.

In brief, agriculture is an integral part of the community in which it exists. It influences the community and in turn, is influenced by community events. Agricultural/community linkages may be either direct or indirect, but they do exist. Further, decision makers who wish to answer the long run viability of agriculture in a particular community must be aware of and understand these linkages. A lack of such awareness and understanding may result in inconsistent policy actions or in an unintentional and unnecessary loss of the agricultural sector in local communities.

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Agriculture and the Community Resource Base

BOB J. NASH

Based on the information presented in the report **After the Factories**, panel presentations, and many of your personal and professional experiences, it is clearly evident that the South, and more specifically the rural South, is undergoing drastic changes in restructuring its economy. A change more dramatic and complicated than the shift in diversification from a primarily agricultural economy in earlier years. There's no need to restate all the reasons we believe we are faced with these problems. They've been documented, verbalized, debated, discussed and cussed over the last few years by many of us. The question is what action can those of us in the South take to transform these problems into opportunities over the short-, medium-, and long-term. To say that solutions and approaches in solving these problems would not be easy is an understatement.

Some of the problems with the rural South's economy are national and international in scope. Consequently, there is outside direct authority and control of the Southern states. However, we must continue to fight those battles as best we can through established national and international procedures.

Other problems and opportunities are more directly influenced by our authority, capability, and commitment to make a difference–a positive difference–in the social and economic lives of our people. I plan to target my comments on the question–What is the importance of access to capital to rural development efforts in the South?

I want to first state a few general principles I believe we should accept and embrace as we participate in the further growth and development of the South. First, we must accept the fact that significant change in improvement in our overall well-being may very well be uncomfortable, controversial and even painful for some individuals and institutions. For example, some of our educational institutions, governmental agencies and people within these groups may need to change, consolidate, or maybe even be eliminated to make way for new and effective responses to the problems facing the South.

Second, it will become increasingly important to educate, inform, and involve a larger portion of the general public in solutions to the critical problems facing the South. We can do this very easily with our peers. But capturing the imagination and developing a broad public vision of what the South could and should be is more difficult, but it must be done if we are to make progress.

Third, we must not allow efforts to contain economic parity with the balance of the United States destroy the South's comparative natural resource advantage, i.e., clean water, abundant energy, and others. This is more a long term economic statement than an environmental protection statement. If we are careful and resourceful in our plans and actions, we can embrace both of these comparable interests.

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Fourth, we must accept the fact that the problems we are intending to solve did not develop over night and they will not be solved over night. No one wants to be patient given the depth and breadth of problems facing themselves. Quick fixes and immediate gratification are not realistic in most cases. As long as we're making sustained progress month in-month out, year in-year out, in the social and economic indicators of the quality of life, I think we'll reach our goal of parity sooner than we think.

Fifth, the issue of equity. Equal access to economic opportunity must be dealt with forthrightly. We cannot and must not expend precious time, money, and a significant part of our effort on depleting the South's human capital--women, minorities, etc.

Let's get into the issue of access capital for rural development in the South. I won't say much about capital for infrastructure and its importance toward development because this issue was discussed yesterday. However, there are several quick notes that I want to make. Given the enormous infrastructure needs in the rural South and the limited capital available, efforts should be made to recommend and finance appropriately-sized water, sewer and other infrastructure systems for smaller communities. In Arkansas, we think that we can realize significant savings in trying to appropriately size answers to infrastructure problems in rural areas. For too many years, small communities and counties have been sold a bill of goods--complicated systems that they can't finance and maintain over a long period of time.

Cooperative funding arrangements between state and federal agencies should be pursued to accomplish what one agency cannot do alone. For example, in Arkansas our Arkansas Development Finance Authority (AFDA) finances construction notes for Farmers Home Administration and sewer systems, because Farmers Home does not have the funds to do construction financing. They had the permanent funds so our agency stepped in and provided construction financing and then the Farmers Home Administration did the permanent financing. This is an example of federal-state cooperation.

Relatively new techniques such as private ownership and operational services of water and sewage systems should be considered as an option by local governments. Statewide investment policies should be adopted to target scarce resources to areas of potential growth and development. This is obviously a politically sensitive issue. However, without some rational bases for the allocation of resources, political expediencies will run rampant and oftentimes turn out wrong. You can't ever eliminate politics from a decisionmaking process, but by having some objective allocation process you can reduce the realm within which it operates.

Traditional public infrastructural investments geared to industrial locations may not be adequate for many of the new opportunities presented to the South today. Transportation and communication investments are very important to emerging business and economic opportunities.

Traditional approaches to capital formation of a business and economic development in the rural South will not work as well as it has in the past. Primary dependence upon tax exempt financing for industrial building, land and equipment is not enough. We must continue to do this as long as the Federal government will let us, but it is not enough. More capital must be provided for additional businesses including agriculture, natural resources, emerging small business and mature industries seeking to modernize. Our states must put up some of their tax dollars for capital needs. They cannot provide the full measure of capital needed for economic development.

Creative arrangements must be developed between private and public finance sectors to make new and different types of capital available. The scarcity of capital in the South's private sector is still a problem. There are a limited number of ready banks in the South. In 1983 the 13 states in this region had 25% of the nation's population, 223% of the nation's personal income, and 19% of all assets held by the banks and S&L's. Many of these institutions are unwilling, incapable, and are rapidly changing their limiting practices to respond to new capital needs in the South. Given all this we must still make changes to provide capital for much needed economic development.

Let me give you some of the examples of what we're trying to do in Arkansas to address capital formation in access. In the most recent session of the general assembly, Governor Clinton

developed and passed a wide ranging economic development program, encompassing training, promotion, community development, and capital formation. Let me talk about the Capital Formation Report for a few minutes and about some of the new capital structures that we are creating.

In 1977 the state of Arkansas developed a State Housing Finance Agency primarily developed to provide adequate financing for single and multiple-family housing. In the recent session of the legislature this agency was reorganized and had its powers expanded in order to finance not only housing (single and multiple-family), but small industrial development deals, public facility financing, agricultural process, and a wide range of other projects. As you know, bond financing primarily deals with large scale projects of a million dollars and up. Under this arrangement, small scale industrial development deals appropriate for small rural areas costing at most 250,000 dollars can be pooled into ten or twelve different projects. Pooled into one project so there's one bond issue.

The Arkansas Science and Technology Authority is a relatively new agency created in Arkansas and designed to capitalize on emerging technology and research oriented businesses. This organization is charged with developing linkages with colleges and universities to tie in with the research being done and to identify potential patents that can be commercialized to create new jobs. They are also in the process of developing incubator facilities with two or three in urban areas and four or five in the rural areas of the state of Arkansas. They also have a seed capital program designed to provide start up capital for new businesses, primarily Arkansas, with an idea and little money. The Authority also has the capability to finance research in colleges and co-fund research in colleges and universities with private businesses in Arkansas.

Another organization is the Arkansas Capital Corporation. This is an organization that has been around since 1970, but it's biggest claim to fame is that since 1957, they've only lost 25,000 dollars. They were set up to be a venture capital organization. Basically, what we did was to reorganize the board of directors of this organization to reduce it from 35 retired bankers who were so adverse to a venture capital deal that if Jesus Christ walked in and presented a deal, they would ask Him for collateral. We reduced the board from 35 to 15 with only 6 small rural bankers on it at this time. In the past it was basically dominated by retired urban bankers. This organization has the capacity to borrow up to 20 million dollars from the state's treasury and we've tried a creative approach here. The constitution of the state of Arkansas prohibits state tax dollars being invested in any private business, but it does not say that the interest on those tax dollars cannot be invested. So what we did was to take the interest off the state's average stated balances to provide loan money to this Arkansas Capital Corporation that in turn will make loans to small businesses that start up in Arkansas with a maximum 500,000 dollars and usually loaned in conjunction with small banks.

There was also created an organization called Arkansas Capital Development Corporation which is a profit-making venture capital organization. We are in the process of raising approximately 5 million dollars in the private sector primarily from financial institutions. The incentive is that we are offering these institutions a seat on the Board of Directors of this organization, 33% of the state tax credit, interest in dividends state tax free, and also the opportunity to pull the risk into one deal. Deals that probably one bank could not do alone, but might do if their funds were pooled together.

Arkansas has five public pension funds with over 2.5 billion dollars in them. Most of these funds are invested out of state, promoting growth and development primarily in the Frost Belt–stocks, bonds, etc. A bill was passed requiring the public pension funds to have at least 5% of their assets invested in Arkansas related investments. We feel like investments in Arkansas are as good and important as investments elsewhere. This was a very difficult deal to pass because retirees, widows, and orphans were complaining that we were going to be "crap-shooting with their money." We had to really explain to them that their money was invested in things that were more risky than the things we were talking about. Investments in certificates of deposit with requirements that banks reinvest the money in their local communities. We will get more aggressive and progressive in the future with the public pension funds, hopefully entering into the venture capital areas.

In the banking area, approximately 25 bills were passed attempting to provide more flexibility to state banks in Arkansas to participate in economic development. Some examples are as follows:

(1) allowing state banks to get involved in equity participation in businesses in Arkansas;

(2) allowing them to use up to 2.5% of their capital to invest in venture capital deals without getting in trouble with the bank commissioner;

(3) allowing them to hold farm land longer so as not to jump to the fact of an already depressed market;

(4) encouraging them and allowing them to invest in these capital cooperations I described earlier; and

(5) allowing other deals to provide flexibility to our state's banks to participate in economic and business development.

Incidentally, all these finance bills have a legislative requirement that the board of directors and the staff seek qualified minority deals. It is not a quota but a legislative intent that they should go out and seek opportunities to promote minority business development.

Some administrative measures we are taking are related to rural economic development. In Arkansas, the state administers a Community Development Block Grant program with approximately 20 million dollars a year coming into the state of Arkansas. What we did was to take off 25% of the Community Development Block Grant funds that normally go for streets, water, sewers, community centers, health centers, etc., and set up something we called an Economic Development Setaside Fund. This is where rural communities, non-metropolitan communities, cities and county apply to our Industrial Development Commission for a grant. They take this money and make loans to a small business in their community–usually at a low interest rate over a long period of time. This has been very successful in our rural areas because it relates to attracting small business to the communities and developing those small business that are already there. It has also leveraged tremendous amounts of private sector funds. There is a one million dollar minority set aside in this 25% overall set aside fund for the state.

We are also making efforts to try to involve our institutions of higher education in the support of developing businesses in Arkansas. Ten percent of the new funds received by institutions of higher education in the recent session of the legislature are targeted toward economic development efforts. Colleges and universities submit proposals to the Department of Higher Education relating how they can help businesses with economic development in their communities.

We are also pursuing some creative ideas with an organization called South Shore Bank in Chicago. It is called the development bank. They have been very successful in Chicago, basically with urban real estate development. We are talking to them about developing a rural development bank in Arkansas geared to rural areas and tied in many cases to the added potential of food processing, etc.

These programs and legislative initiatives are not necessarily new or innovative but they represent catch-up efforts on the part of our state. They are expanding and diversifying economic development and industrial development to a wider range of opportunities. This is only a start and more must be done in Arkansas and in the South.

I think that it is helpful to reflect upon a statement by an African king as we go about our work–"The work we do now is for you who are dead, some who are living, and many more yet unborn."

Agriculture and the Community Resource Base

MIKE D. WOODS

Introduction

A major purpose of this workshop is to examine the changing economy in the rural South and identify emerging issues facing residents and leaders in these rural communities. Recent employment patterns and a classification of nonmetropolitan counties by resource base have been presented and discussed. This paper is part of a fourth panel organized to address emerging issues. The panels include: infrastructure and transportation; education; values and attitudes; and this final panel concerning agriculture and the community resource base.

Several issues will be addressed as part of this paper. The resource base in the southern rural economy including both agriculture and nonagriculture sources will be examined. Linkages between agriculture and nonagricultural sectors of the rural economy will be discussed. These linkages highlight the potential role agriculture may play in the future economy of rural areas. Finally, the role of states and universities in rural development efforts will be discussed.

The Resource Base in the Southern Rural Economy

In order to discuss the importance of agriculture to the rural economy the overall resource picture should be considered. Agriculture is an important part of the resource base - but not the only important segment. The USDA recently reported on the diverse social and economic structure of nonmetropolitan counties in the U.S. (Bender, et al.). The USDA study notes several sources of employment and income including agriculture, mining, federal lands (a special type of resource structure), manufacturing, government functions, and retirement (see Figure 1). Counties meeting a certain level of activity were classified in one of these groups. Counties ranking lowest in income were classified as poverty counties. Counties not meeting any of the criterion were classified in an additional category called "ungrouped." As discussed in the USDA report each class of counties demonstrates a special set of demographic and social characteristics.

In an earlier article Doeksen, et al., classifies communities by type and included some of the USDA categories. Additional types of communities mentioned were those dependent on recreation as well as satellite (or bedroom) communities. The two articles highlight the diversity of

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nonmetropolitan areas. Alternative development policies, federal or state policies, and macro variables will affect these different types of economies in different ways. Working on a local level, the existing resource base, strengths, and weaknesses must be identified to formulate a reasonable development strategy. Agriculture, in many cases, will play an important role in this development.

Figure 1

Community-County Typology By Resource Base and Economic Status

CLASSIFICATION	SOURCE
Agriculture	Bender, et al.
Mining	
Federal Lands	
Manufacturing	
Specialized Government	
Retirement	
Poverty	
Recreation	Doeksen, et al.
Satellite	
Trade Center	
Other	

Agriculture - Community Development Linkages

Agriculture does play a key role in much of the Southern rural economy. The agriculture sector represents direct production, income, and employment that many counties depend on. Agriculture extends far beyond the farm gate to include agribusiness such as feed dealers, seed dealers, fertilizer and agricultural processing and distribution businesses. Also, local governments depend on revenues resulting from a healthy economy. If agriculture and related support industries experience hard times, sales taxes and other revenue sources often mirror the situation. Local governments then find it difficult to provide the services and facilities expected by local residents.

It should be noted that the linkages between agriculture and communities flow in two directions. Many farms depend on off-farm income to supplement total family income. A strong local economy in general provides more opportunities for farm families to supplement income and remain in the industry.

As noted, the USDA recently released results of a research project which classifies nonmetropolitan counties in the U.S. into several socioeconomic types (Bender, et al.). The agricultural counties included 700 of the 2500 nonmetropolitan counties where 20 percent or more of earned income came from the agriculture sector during the years 1975-1979. These counties were concentrated in the north central region of the country. Texas also had a high representation with 62 counties falling in this category.

Texas has a total of 254 counties statewide. Of these, 200 counties were classified as nonmetropolitan in the 1980 census. As noted previously, the USDA study classified 62 of the 200

nonmetropolitan counties as agriculture dependent. Nonmetropolitan counties in Texas included about 20 percent of the total state population. The agriculture dependent counties represented about 4 percent of total state population. As noted in the USDA studies these counties are less densely populated and more rural.

Tables 1 through 4 provide further detail concerning nonmetropolitan counties in Texas. Table 1 lists persons by rural or urban residence with farm population also listed. The nonmetropolitan counties are divided into two groups: agriculture dependent and others (nonmetropolitan counties not classified as agriculture dependent). The key point is the small population level associated with the agricultural counties. Table 2 lists persons by age for the two groups of nonmetropolitan counties. It is interesting to note similar age levels for the two groups. The national study noted the agriculture dependent counties had an older population but this does not seem to be the case in Texas. Table 3 lists employment by sector for the two groups of nonmetropolitan counties. As would be expected, the agricultural dependent counties had a higher percentage (22 percent compared to 14 percent) of employment in the agriculture sector. The construction and manufacturing sectors pick up the slack for the counties not classified as agriculture dependent. It is very notable that all other sectors have similar levels of employment for the two groups. Table 4 attempts to measure the human resource potential of the two groups of counties. Agriculture dependent counties lag in level of education somewhat but not by a significant amount.

TABLE 1.

Number of Persons, Nonmetropolitan Counties in Texas

	Agriculture Dependent	Percent	Others	Percent
Urban	191633	37	1152413	49
Rural	326945	63	1178183	51
(Farm)	(55782)	(11)	(132963)	(6)
Total	518578	100	2330596	100

Source: U. S. Bureau of Census, Summary Tape File 3A

TABLE 2.

Persons by Age, Nonmetropolitan Counties in Texas

Age	Agriculture Dependent (Percent)	Others	Percent
Less than 16	27	26	
16-21	10	11	
22-54	37	38	
55 or greater	26	25	
Total	100	100	

Source: U.S. Bureau of Census, Summary Tape File 3A

TABLE 3.

Percent Employed Persons 16 and Over By Industry, Non-Metropolitan Counties in Texas

Sector	Agricultural Dependent	Other
Agriculture, Forestry, Fisheries, Mining	22	14
Construction	7	9
Manufacturing	12	16
Transportation	3	4
Communication, Other Public Utilities	3	3
Wholesale Trade	4	4
Retail Trade	15	16
Finance, Insurance and Real Estate	4	4
Business and Repair Services	3	3
Personal, Entertainment and Recreational Services	4	4
Professional Services	19	19
Public Administration	4	4
Total	100	100

Source: U.S. Bureau of Census, Summary Tape File 3A

TABLE 4.

Percent Persons 18 Years Old and Over By Years of School Completed, Nonmetropolitan Counties in Texas

	Agriculture Dependent	Other
Elementary Through 3 Years High School	51	47
High School, 4 Years	28	30
College:		
1-3 Years	12	14
4 Years	5	5
5 or more Years	3	4
Total	100	100

Source: U.S. Bureau of Census, Summary Tape File 3A

The role of agriculture in future economic development will vary by region and location in the South. Closer evaluation by commodity and geographic location is necessary to completely answer the question. In agriculture-dependent counties factors such as agricultural policy, foreign trade and interest rates will be important. In counties less dependent on agriculture other factors will take precedent.

Strategies for Economic Development

There are several options available for development in nonmetropolitan areas. Figure 2 lists options that are discussed in detail by Pulver (1979) and Crawford, et al. (1981). The first option listed is to increase new basic jobs and through the well discussed multiplier effect create both direct and indirect jobs/income. This is the traditional method of development pursued by states, agencies and development organizations. This option should not be ignored but local areas should realistically evaluate available resources and this potential.

A second option listed is to improve existing firm efficiency. This might involve better management techniques which allow businesses in an area to increase sales or profit, thus increasing local income. Along with this option is a third possibility, increasing local ability to capture additional income. Often much sales leakages occur in nonmetropolitan areas. Improved marketing techniques may lead to increased income in a given local area. A fourth option available is to aid in new business formation where the potential exists within a local economy. This is referred to as "homegrown" industry rather than recruitment from outside the local area.

The fifth option listed in Figure 2 is retention and expansion. This option is closely related to the previous three but listed separately because of unique characteristics. Crawford, et al. describe a firm inventory and visitation program designed to provide early warnings of problems with existing firms as well as building close community - business relationships. The final option listed is to increase aid from broader government. This might involve increased state or federal aid to build local infrastructure necessary for development opportunities. Also, the encouragement of special types of residence patterns (older residents near retirement, for example) may bring additional government dollars to a local economy.

Figure 2.

Strategies for Development*

New Basic Jobs
Improve Existing Firm Efficiency
Increase Ability to Capture Income
New Business Formation
Retention and Expansion
Aid from Broader Government

*Source: Crawford, et al. and Pulver.

Role of Universities and Education

As noted by Pulver and Crawford, et al. there are many developments open for states to pursue. Figure 3 discusses resources needed to insure economic growth. Those resources can take three forms: human resources (a well educated workforce); natural resources (minerals, land, water, etc.); and institutional resources (government, financial institutions, etc.). All of these resources work together to produce economic growth and income. It is worth noting that the rate of resource use and the efficiency of resource use determine the ultimate level of economic growth. State government has many options available in pursuing development opportunities. Hayden, et al. presents a summary of many of these policies. The remainder of this paper will address the role of university professionals, in particular, rural development research and extension specialists.

Figure 3

Economic Development Flow Chart

HUMAN RESOURCES	NATURAL RESOURCES	INSTITUTIONAL RESOURCES
	TOGETHER PRODUCE	... Rate ... Efficiency
	ECONOMIC GROWTH INCOME	

*Modified from Tweeten (1976).

Land grant university researchers and extension personnel are in a unique position to assist rural areas in this economic development effort. The following are key areas of potential effort:

Extension Education:

Understanding the Local Economy - What are available resources and how does a rural area emphasize strengths and improve upon weaknesses.

Economic Development - What are possible options and trade-offs associated with each option.

Business Management - Improving the efficiency of existing firms through such educational programs as personnel management, time and office management or financial management. Also increasing the existing firm's ability to capture additional income through marketing techniques such as merchandising, customer relations, advertising, etc. Both these business management topics are listed in Figure 2: Strategies for Development. For an excellent summary of business management educational programs offered through Extension see Fisher (1985).

Research:

Agricultural-CD Linkages - What are the linkages and importance to local economic development.

Risk-Return Trade-Offs - Which sectors of the economy offer the most potential for economic development. Local leaders should consider not only return (jobs and income) but also the variability and cyclical nature of the economic growth.

White (1986) notes that education to support human resources in the South is essential. It should be noted that Extension education (and the research supporting it) is an investment in our human resources. We not only impact the rate and efficiency of our resource use, but we actually increase our potential in people resources.

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CLOSING ADDRESS

JONATHAN P. SHER

I will not presume to summarize this conference, or insult you by telling you what you saw and heard during our time together. In fact, I'm certain that we all have come away with a different interpretation of what we heard and what we saw here.

I feel a kinship with Charlie Brown at the moment and not just because I fit Snoopy's description of Charlie Brown as "that round-faced kid". One of my favorite Peanuts cartoons opens with Charlie Brown and Linus lying on a hillside looking up at the clouds. Charlie Brown asks Linus if he sees anything in the shapes of the clouds–and Linus responds "Oh yes, over there I see Michelangelo's sculpture 'The Pieta,' and over here I see Rembrandt's painting 'The Passion of St. Matthew,' and just above the trees I see the outline of the Cathedral of Notre Dame." Then Linus turns and asks: "How about you?" Charlie Brown sighs and answers: "I was going to say I saw a ducky and a horsey, but I think I'll just skip it."

Since the conference organizers have gone to some trouble, and expense, to bring me to Birmingham, I don't have the option of skipping it–so I will take this time to share with you a description of the "ducky" and the "horsey" I've seen in the cloud of facts, figures and fulminations generated in these two days.

The basic working document of this conference, **After the Factories: Changing Employment Patterns in the Rural South** authored by Stuart Rosenfeld, Edward Bergman and Sarah Rubin strikes me as being a model of policy-relevant scholarship. It is timely, well-designed, well-executed, well-written, and creatively uses existing data to document and highlight a critical set of issues that might otherwise have been overlooked by our region's planners and policymakers. This publication, and the related data offered by a number of the other presenters, ought to be widely disseminated and discussed. As Governor Clinton pointed out, the macro-level analyses we've been fortunate enough to receive through this conference are vital in creating a shared base of knowledge and a common way of defining and describing the troubling trends in the South's non-metropolitan development patterns. Dr. Rosenfeld and the organizations sponsoring both this document and this conference deserve our thanks and our congratulations on a job well done.

And yet...and yet, I leave this gathering of bright and dedicated people–people who have worked long and hard in their own ways to help the rural South–with a vague sense of unease and a nagging feeling that there has been as much left **unsaid** as said.

Perhaps this feeling arises from my sense that there has been an imbalance in the presentations and discussions here. The macro-level story has been told with considerable skill, but the micro-level stories (with a couple of notable exceptions) have been left largely unvoiced. In part, I'm

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President, Rural Education and Development, Inc.

seconding the recommendation in Stuart's report that a series of case studies ought to be carried out as a balance to the kind of "reality" conveyed by aggregate statistics.

We need to better understand what's **actually** happening inside of our rural counties instead of being sanguine that labels like "rapid growth" or "persistent poverty" are self-explanatory in terms of their meaning and implications. The view from the ground and the view from the air reveal different realities, and both perspectives are needed in order to arrive at anything resembling the truth about where things stand and where they're headed in our region's non-metropolitan counties.

Many of the presenters effectively described a pattern of uneven development between the metro and non-metro South. Governor Winter, in particular, was eloquent in warning of the dangers inherent in the emergence of two Souths–one, a metropolitan **Sun**Belt of growth and opportunity, and the other, a non-metropolitan **Shadow**Belt of stagnation, decline and exploitation. Forgive me for quoting Abraham Lincoln, but he was right when he argued that "a house divided against itself cannot stand." In previous generations, when the South's house was deeply divided along racial lines, it could not stand (let alone rise again). So too, if the South's house is allowed to become deeply divided along urban/rural lines–with one prospering at the expense of the other--the South's bright future will not be realized. **Placism** is no more morally or economically justifiable than **racism** as a way of distributing society's wealth and opportunities.

I'd like to emphasize two related points that were only alluded to in our deliberations. One is that we need to better understand the way in which changing economic and demographic patterns are exaccerbating divisions within the South–not just between metro and non-metro counties, but also within non-metro counties themselves. There are enormous disparities in the ways in which the benefits of non-metropolitan development are being distributed within counties. Yet, these internal divisions are rarely acknowledged or taken into account by policymakers.

Gardenia White's description of uneven, and unequal, development in one of our most conspicuous areas of non-metropolitan growth ought to haunt us. By standard measures, Beaufort County, South Carolina, is one of the non-metro bright spots in the region---low aggregate unemployment, a booming economy, an influx of retirees and well-educated in-migrants with above average incomes. And yet, these "good times" have not routinely been translated into "good educations," "good incomes," "good jobs," or "good lives" for many of the county's native sons and daughters. For them, the much touted service sector has too often become a dead end "servant sector."

Policymakers must be sensitive to the patterns of development **within** counties as well as **between** counties, if the benefits of economic and employment growth are going to be fairly distributed--and if local rural people are to (at long last) reap the rewards of the development of their **own** counties.

Another point raised only in passing merits our attention. Put simply, the South will no longer be able to export its poor, its inadequately educated, its "surplus" labor or its less favored citizens to northern cities (as it has in the past). The exodus from the rural South to the urban North represented an opportunity not only for individuals to try to improve their quality of life, but also for our region to be spared the "burden" of carrying for all these folks as it struggled to build up its economy. This time around, however, there's no place for the South's less favored sons and daughters to go--and they know it. There will be no convenient disappearing act this time, and no big migration of the folks we don't know what to do with into jurisdictions beyond our reach...and thus, beyond our conscience. Jesus said, "The poor will be with you always." At least for the foreseeable future, it is an unfortunately accurate prediction about the non-metropolitan South.

In my view, this conference has been heavy on information and problem identification, but relatively light on strategies for taking effective, democratic action to concretely deal with the ominous trends and patterns so persuasively documented. Information alone will not solve our problems. Instead, good information must be supplemented by both our collective wisdom and our firm commitment to meaningful action.

At times, this conference has reminded me of the story of the ambitious young man travelling around the countryside selling encyclopedias of farming. One day, after listening patiently while the salesman described all the valuable information contained in these volumes, an old farmer stopped him by saying, "Son, I'm not farming half as well as I know how to now!"

I'm not criticizing what this conference has accomplished–for I believe the accomplishments have been considerable–as much as I am suggesting an agenda for the next round of discussions that ought to occur at the local, state, regional and national levels. This conference has provided a wealth of information, but neither resolved the issue of how this information should be translated into better educational, economic and employment policies, nor how we can **ensure** that these hoped for "better policies" will actually lead to improved lives for **all** our region's non-metropolitan citizens.

WHAT WILL WE DO about the trends, patterns, problems and opportunities brought to our attention during these proceedings? Equally important WHO will decide what **ought** to happen and WHAT PROCESS will be employed to decide what, in fact, **will** happen in our non-metropolitan communities? My hope is that the processes of analyzing, planning and decision-making about the future of the rural South will **not** become the exclusive province of corporate officials, various experts and academics, or even state leaders. Rather it is my hope that a broad cross-section of rural people will play a direct, continuing and influential role in the decisions shaping the future of their own communities and their own area's economies.

My fear is that the decision-making process will bypass rural people, overlook the potential for fostering rural empowerment and degenerate into an economic version of the old television show "Queen For a Day." I'm sure you remember this popular TV show in which a group of women would come on stage and tell tales of woe that were absolutely heart-rending: their husbands had died, they'd lost their jobs and their children were in the hospital or their uninsured houses had burned down destroying everything they owned. As you remember, the woman with the saddest story "won!" That was bizarre enough. However, even more bizarre was what this woman would receive for winning–usually something from the Spiegel catalog and a week's vacation in Acapulco. The "Queen for a Day" never won a new home, a new job, or payment of all the children's medical bills. Instead, she received a new toaster and a trip out of town...

The key lesson can be found in the gap between what was wrong and what was done in response. The "solution" had little to do with the very real and difficult problems these women faced. So, too, my fear is that what both the public sector and the private sector will do about non-metropolitan economic and employment issues in the South will bear little relation to what is actually wrong. Simply "doing something" about education, infrastructure, agriculture, capital formation or other key topics will not be enough. Instead, our policies and programs must be more explicitly and sensitively targeted to the real nature and circumstances prevailing in our non-metropolitan counties. The long-standing practice of creating national policies and state policies based almost exclusively upon the needs and conditions of our metropolitan areas cannot be allowed to continue.

This principle applies across the board, but I will use the example of education–both because it has generated so much attention at this conference and because it is the area in which I most often work. It's interesting that states are spending more money on education, but it is **by no means certain** that this new spending will either markedly improve the life chances of rural Southerners or strongly stimulate a rejuvenation of our region's non-metropolitan economic and employment base.

This is the case for two reasons. First, quality basic education is a **necessary, but insufficient** precondition for quality rural economic development. In other words, a good basic education system does not guarantee that good new jobs or good new businesses will result; however, a poor basic education **does** guarantee that first-rate businesses and good new jobs will **not** be forthcoming.

Second, the crucial issue is not the number of new dollars for education, but rather what is done with those new dollars. If our schools continue to socialize rural children (especially poor children, Black children and female children) to be passive, docile and to have low aspirations and

expectations (as was the case with their parents) we cannot be surprised when poverty persists and local economies decline. If our vocational education and training programs continue to emphasize the development of ever better job applicants--and pretend not to see the dilemma of too few good jobs for which to apply in either rural or urban areas--then new spending will only reinforce old problems.

We can do better than playing "Queen for a Day" with the South's nonmetropolitan communities. The Southern Growth Policies Board's Commission on the Future of the South--especially given the distinguished leadership of Governor Clinton and former Governor Winter-offers an unusually good opportunity to both establish a data base and create a political consensus/constituency for quality non-metrtopolitan development. I look forward to its activities with great anticipation and interest.

A second cause for hope was underscored by Bob Nash's presentation in which he made it clear that states can be (and, in some cases, are) making genuine and significant strides on behalf of rural people, rural communities and the rural economy across the South. It takes political will. It also takes a willingness on the part of state policymakers to be flexible and to try new measures addressing long-standing rural problems--all the while helping rural people to tap the economic and employment potential of their own communities.

And finally, I am greatly heartened by the variety of fascinating and promising local rural initiatives taking place across the region--sometimes sponsored by universities, community colleges, and public schools, sometimes by churches, sometimes by state and local governmental agencies and sometimes by community groups and local organizations. These are often small-scale efforts and initiatives, but their combined impact may be greater than one would guess. More important, such local rural programs are sowing seeds that have the potential to yield rich rewards (especially if properly nurtured and disseminated beyond their current boundaries) for the non-metropolitan South.

In short, there are ample reasons to feel discouraged and, simultaneously, at least equally ample reasons to feel encouraged about the future of the rural South. Such are the ironies and contradictions of this conference. Indeed, such are the ironies and contradictions of real life, particularly in a region as complex and diverse as the South.

Should we be optimistic or pessimistic about the long term consequences of changing patterns within our rural economic and employment base? I remember the definition of an optimist as being someone who believes that this is the best of all possible worlds, while a pessimist is someone who's afraid that the optimist is right! Thus, my suggestion is to be neither a pessimist nor an optimist, but rather to be a realist.

Together, we must keep striving to realistically assess the changes occurring around us, and then put aside the traditional assumptions and blinders keeping us from implementing realistic new strategies for taking proper advantage of the resources (natural, human and institutional) with which the rural South has been blessed.

The challenge I want to place before you as you return home is to ask, "What will you do--as an individual and as a representative of your organization--to carry forward the information and issues brought to light during this conference?" What will you do to become important in the on-going struggle to unlock the rural South's enormous potential for economic excellence and equity?

I would like to end my remarks with a story told by a colleague from South Carolina named Hayes Mizell. It seems he was walking down the main street in Columbia one day when he saw a friend approaching wearing a top hat and tuxedo. It was the middle of the day during the middle of the week, and Hayes just had to inquire as to why his normally casually-dressed friend was so formally and impressively attired. His friend said, "Hayes, I'm on my way to have a vasectomy," to which Hayes responded, "Wait a minute. What does having a vasectomy got to do with wearing a top hat and tuxedo?" His friend looked him in the eye and replied in his best Southern drawl, "Well, I'll tell y'all. If I'm goin' to be im-po-tent, I want to look impo'tant!"

So too, the challenge before us all is whether we'll be impotent, or be important, in the perpetual struggle to improve the quality of life for all rural citizens throughout the South.

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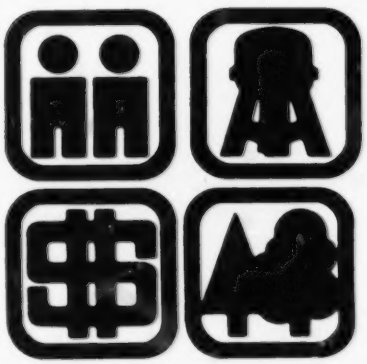

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